

71-20,940

SALVATORE, Dominick, 1940-
BACKWASH EFFECTS, SPREAD EFFECTS AND THE
DEVELOPMENT OF THE POSTWAR ITALIAN SOUTH.

The City University of New York, Ph.D., 1971
Economics, theory

University Microfilms, A XEROX Company, Ann Arbor, Michigan

© COPYRIGHT BY

DOMINICK SALVATORE

1971

BACKWASH EFFECTS, SPREAD EFFECTS AND THE DEVELOPMENT
OF THE POSTWAR ITALIAN SOUTH

by

Dominick Salvatore

A dissertation submitted to the
Graduate Faculty in Economics in partial
fulfillment of the requirements for the
degree of Doctor of Philosophy,
The City University of New York.

1971

This manuscript has been read and accepted for the Graduate Faculty in Economics in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

January 18, 1971
date

Edwin P. Reubens
Chairman of Examining Committee

1/18/71
date

Elliot Zupnick
Executive Officer

Bernard Okun

Elliot Zupnick

Emanuel Tobier
Supervisory Committee

The City University of New York

ACKNOWLEDGMENTS

My greatest indebtedness is to my dissertation director, Professor Edwin P. Reubens, who generously devoted considerable time to help plan, shape and revise this dissertation. No student could ask for a better dissertation director.

Professor Bernard Okun made many constructive suggestions for improving this study. For that I am very grateful. To Dean Elliot Zupnick I express my deep gratitude for the help and guidance he extended to me throughout my graduate studies. As a member of this dissertation committee, his incisive comments enabled me to correct many weaknesses in this study. I also thank Professor Emanuel Tobier for serving as a dissertation adviser.

My sincere appreciation goes to the late Professor Alfred H. Conrad who as the co-chairman of this dissertation made numerous valuable suggestions. Professor Conrad's untimely death was a great loss to his students, to the economics profession, and to all men fighting for human dignity.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	
Preview	1
Historical Background	18
II. THE THEORY OF THE BACKWASH AND SPREAD EFFECTS	
Myrdal's and Hirschman's Theory	51
Theoretical Evaluation and Extension of Myrdal's and Hirschman's Theories	62
Applicability of the Theory	98
Conclusion	105
III. THE MOVEMENT OF PEOPLE	
Introduction	107
The Data	107
Determination of the Backwash or Spread Effects of Emigration in the South	120
Measurement of the Spread Effect of Emigration	141
Concluding Remarks	146
IV. THE MOVEMENT OF CAPITAL	
Introduction	149
Interregional Flow of Savings	149
The Inflow of Northern Private Capital to the South	170
Inflow of Emigrants' Remittances to the South	171
Abandonment of Fields and Houses	180
Summary and Conclusions	186

	Page
V. THE MOVEMENT OF GOODS	
Introduction	188
The Flow of Agricultural Commodities and Raw Materials	188
The Flow of Manufactured Goods	197
Summary and Conclusions	214
VI. NET EFFECT, INTERACTIONS, AND MORE DYNAMIC ASPECTS	
Introduction	216
Net Effect	217
Interactions	224
More Dynamic Aspects	228
Conclusion	243
VII. GOVERNMENT'S AID TO THE SOUTH	
Introduction	246
Government Aid to the South through the Fiscal System	247
The Central Government's Development Program for the South	250
Evaluation of the Development Program	269
New Policy Suggestions	276
Economic Changes in the South and in the North, 1951-1967	289
VIII. CONCLUSIONS	
Conclusions Reached	300
Major Policy Suggestions Advanced	306
BIBLIOGRAPHY	311

LIST OF TABLES

Table	Page
1. Occupational Distribution of the Working Population in 1861, in Percentages	24
2. Railroad Mileage (in Kilometers) in North and South in 1861	27
3. Highway Mileage (in Kilometers) in North and South in 1863	27
4. Population Present, Employed Population, and Sectoral Distribution of the Labor Force, in the North and the South, in 1951	31
5. Net Regional and Sectoral Output, in 1951 . . .	33
6. Indicators of Economic Disparity between South and North in 1951, Net Output Per Person Present and Per Working Person	34
7. Capital Per Worker, Per Sector, Per Region, in 1951, at 1963 Prices, Expressed in Dollars . .	36
8. Percentage Distribution of the Industrial Labor Force in the North and South, Per Firm Size, in 1951	37
9. Altimetric Zones of Cultivated Land; Percentage Distribution	38
10. Composition of the Working Population in 1936 - Percentages	44
11. Net Emigration From South to North, 1952-1968 .	110
12. Net Emigration of Workers From South to North, by Sector, 1956-1966	112
13. Education of Southern Emigrants: 1964, 1965, 1966	114
14. University and College Degree Holders in North and South in 1951 and 1961	119
15. Number of University Degrees granted to Southerners, 1958-1966	123
16. University Degrees granted to Southerners According to Faculties, 1958, 1962, 1966 . . .	123

Table	Page
17. Students Graduating from "Colleges" and Similar Institutions in South and North, June 1966 . . .	130
18. Labor Force, Number of Unemployed and Emigrating Workers From the South, 1951-1968	135
19. Estimates of the Size of the Real Benefits, Per Person Remaining in the South, Per Year, Resulting From the Net Emigration to the North, 1952-1968	142
20. Bank Deposits, Required Reserves, Funds Available, and Funds Used in the North, at Year End, 1951-1968	154
21. Bank and Postal <u>Savings</u> , in the South, 1951-1968	164
22. Estimates of the Remittances to the South, from Southern Workers who Emigrated to the North, 1951-1968	178
23. Abandoned Houses in the South by Location, 1951 and 1961	182
24. Population Resident in the South by Location, 1951, 1961, 1968	183
25. Area Under Cultivation in North and South, 1955 and 1966	184
26. Number of Business Failures in Manufacturing in North and South, 1951-1968	199
27. Value of Manufacturing Production of the South and Estimates of the Value of the Net Manufacturing Imports of the South from the North, 1951-1967	204
28. Value of Net Imports of the South from the North and from Other Nations, by Type of Product, 1951-1968	210
29. Backwash Effect on South Due to National Tariff Policy on Manufactured Imports	215
30. Net Effect of the Backwash and Spread Effects on the South, 1952-1967	218
31. Revised Net Effect on the South of the Backwash and Spread Effects, So Far Measured, 1952-1967	233

Table	Page
32. Taxes Raised and Ordinary Government Expenditures, in North and South, 1951-1968	248
33. Yearly Expenditures of Cassa on the Development of the South, 1951-1968	256
34. Allocation of the Funds Spent by the Cassa, From 1951 to 1968, By Use	257
35. Relative Weight of I.R.I. Holdings in 1962 By Sector	264
36. Overall Financial Aid Received by the South, 1951-1968	267
37. Birth Rate in the North and in the South, 1950 and 1962	277
38. Cost of Education Expenditures Per Pupil, in 1961	279
39. Population Present, Employed Population, and Sectoral Distribution of the Labor Force, in the North and the South, in 1967	292
40. Net Regional and Sectoral Output, in 1967	293
41. Indicators of Economic Disparity Between the South and the North in 1967: Net Output Per Person Present and Per Working Person	294

LIST OF MAPS

Map	Page
1. Regions of Italy	21
2. Mezzogiorno	23
3. Industrial Areas and Nuclei	261

CHAPTER I

INTRODUCTION

Preview

Preliminary Remarks

Development of underdeveloped nations and regions is one of the greatest challenges facing the world today. Strife and tensions will undoubtedly increase over the next decades unless the widening inequalities between rich and poor can be reversed or at least checked. The prospects of doing this are bleak. The problem is rendered difficult to solve because we still lack a generally and universally accepted theory of development to be applied to underdeveloped nations and regions so as to speed their rate of development. Despite this lack of a generally accepted theory of development, most economists interested in this field agree that in order for these areas to develop they must solve two distinct yet closely interrelated problems: (1) how to get and increase the resources needed for development and (2) how to use the available resources most efficiently for development.

The first difficulty (that is, how to get a sufficient amount of resources for development) is magnified by

the very low per capita incomes prevailing today in underdeveloped nations and regions. With such low per capita incomes, private and public savings must be increased, but this is difficult to do because personal and public consumption are already so low. Thus any voluntary or involuntary (that is, through taxation) reduction in such an already low consumption levels might be detrimental to the very development it is intended to promote (lower stamina, poorer health, etc.). A successful attack on this first problem is often rendered even less amenable to solution by the fact that in certain circumstances even the saving actually generated and the investments made in raising the relatively few skilled workers in the underdeveloped countries and regions are lost to these areas through emigration to richer and more dynamic areas. The latter possibility is more likely, and its effect more deleterious, in the case of an underdeveloped region of an otherwise developed nation, than for other independent underdeveloped countries. The difference here is more quantitative than qualitative, however.

After as much resources as possible under the circumstances have been obtained, the second difficulty arises as to how to employ this potential most efficiently; that is, in a way most conducive to development. This will involve the choice of the proportion of the available resources to be spent on the formation of human capital (skills necessary for development) and the proportion to be spent on the

formation of material capital (machinery, factories, electrical plants, roads, etc.). Thus both (more human capital and more material capital) are needed for development, and the question of which should be stressed cannot be resolved by theoretical speculation, but depends on the specific conditions in the particular underdeveloped country or region under consideration, on its stage of development, and so on. The same choice that exists between human and material capital also exists within each category; that is, the specific skills and the particular form of material capital creation to stress. Again, as before, the choice here is to stress those skills and those particular forms of material capital which will lead to the greatest long-run increase in real per capita income. This is easy to state on paper but extremely difficult to actually carry out in the reality of underdeveloped nations and regions; nevertheless, an intelligent attempt must be made to carry out this theoretical dictum, otherwise there will surely result a tremendous waste of the very scarce developmental resources available to these poor areas.

Thus what has been said so far is that an underdeveloped country or region seeking to develop must solve two basic problems: how to get as much developmental resources as possible and how to use these resources most effectively. It would be wrong, however, to infer from the above that these two problems are independent of one another. In the real world, they are closely interrelated

and can only be attacked together. They have only been (and will be) discussed separately here in order to concentrate on each of the two major aspects of what in reality is a unique problem: how to develop. The best possible situation from the point of view of the development of an underdeveloped area would be, of course, the case where as much as possible of the "potential" resources for development are in fact raised (through private or public saving), that the resources so raised are at least sufficient to undertake a "critical minimum effort,"¹ and finally, that they are used efficiently within the underdeveloped area to provide for the needed human and material capital so as to maximize its long-run real per capita income growth.

This dissertation deals with both of the basic problems discussed above (resource availability and resource uses). This is done because recognition is given to the fact that resource availability becomes of overriding interest only to the extent that the potentially available resources would actually be used for developmental purposes. Thus the profitability of resources or what actual use would be made of them is a crucial problem which must and will always be kept in mind whenever the question of resource availability will be discussed in this dissertation. More specifically, this dissertation is concerned with the

¹Gustav Ranis and John C. H. Fei, "A Theory of Economic Development," The American Economic Review, LI (September, 1961), 549-57.

question of how the development potential (the availability of resources, their uses, and their effect on the average per capita income and its distribution, and on the structure of the economy) of a particular underdeveloped area--the Italian South--has been (and is) affected, both from a static and from a dynamic point of view, in the process of its interrelations with the rest of the Italian economy.

Myrdal's and Hirschman's Theory

According to Gunnar Myrdal, Albert O. Hirschman and others, the net effect of the unhampered operation of the market mechanism is detrimental to the development of an underdeveloped region in an otherwise developed country. To be sure there are some benefits (Spread Effects) which accrue to the underdeveloped region from its association with the developed one, but they are invariably more than overwhelmed by the harmful effects (Backwash Effects). As a result some of the development potential of the poor region is drained out of it, thus generally retarding its actual and prospective development.

The overall aim of the dissertation is to see if this is, in fact, what occurred in the Italian South from 1950 to 1970. Has the operation of the market mechanism drained the Italian South of part of its development potential, in general, and of its productive resources, in particular? If this has been so, how serious has it been?

Has the expenditure of the Cassa¹ been of a kind and of a magnitude sufficient to neutralize the excess of the Backwash over the Spread Effects that resulted from the unhampered operation of the market mechanism? What policy suggestions can be deduced from analyzing the way in which the market mechanism operated in the past and the type of intervention thus far put forth by the Cassa--from the point of view of achieving take-off into self-sustaining growth in the South? These are the general questions to which I will seek an answer.

More schematically: development of the South (measured by the increase in its real per capita income per year and by the structural changes taking place over time in the economy of the South) is a function of purely internal (to the South) factors and its interrelation (through the operation of the market mechanism) with the rest of the Italian economy (and the world). These interrelations of the South with the outside world take the form of movements of people, movements of capital, and movements of goods. Some of these sub-movements are entered with a negative sign² (that is, they are detrimental to the development of the South--Backwash Effects), some with a positive sign (beneficial to the South--Spread Effects). They represent, in essence, decreases or increases in the development potential of the

¹Roughly, Fund for the Development of the South.

²The word "sign" is not to be taken in an algebraic sense here but in the dictionary sense of meaning "harmful."

South. I am interested in measuring quantitatively, and as disaggregatively as the data available permits, the various Backwash and Spread Effects between the South and the North of Italy and their interrelations (if any), so as to determine if the overall effect of the unhampered operation of the market mechanism has been beneficial or detrimental to the development of the Italian South. And by analyzing these and the work of the Cassa, I would finally bring out the implications which they have for future policy considerations.

The Central Hypothesis of the Dissertation

Myrdal and Hirschman stated that in the course of the unhampered operation of the market mechanism in a nation which is divided into a developed and underdeveloped region, a net Backwash Effect usually results in the poor region. However, whether or not this is indeed true in a particular case depends upon certain structural features of the economy of the poor region (such as the existence or non-existence of surplus labor, surplus capital, etc.), on the interregional flows taking place (such as interregional migration, the interregional flow of investment funds, and interregional trade), and on the magnitude of these interregional flows in relation to the magnitude of the structural features of the economy of the poor region.

The aim of this dissertation is to examine empirically if a net Backwash Effect actually resulted in the

Italian South in the post-war period, given the structural features of its economy, given the interregional flows that took place, and given the magnitude of those interregional flows in relation to the features of the economy of the South.

Relation to Regional Theory

Throughout this dissertation, the point of reference will be the region, and only indirectly the nation. That is, a particular factor will be regarded as harmful if it retards the development of the Italian South; as beneficial if it promotes it. Thus an outflow of Southern resources (for example, private capital, skilled labor, etc.) to the North will be regarded as harmful to the South if these same resources could and would have been effectively used within the South; their loss to the South will reduce the productive resources potentially available for its development. In essence, the poorer South would be extending aid to the richer North, rather than vice-versa as dictated by criteria of fairness and equity. It could be argued, on the basis of regional theory, that if resources flow out of the South and into the North it is because they are more productive in the latter, and therefore this is beneficial from the national point of view. This, however, may not be so if, for example, the market mechanism is not working properly. Thus prices do not truly reflect the relative scarcity (opportunity costs) of labor and capital within

the South (e.g., wages are too high as evidenced by the very large involuntary unemployment prevailing and persisting in the South), as a result of this structural disequilibrium at the factor level, the flow of resources is distorted in favor of the North. In addition, resource flows respond to their private profitability, and while this may be higher in the North, the social one may be greater in the South.¹ But even if this were not so, that is, even if these resources were in fact more productive in the North, both from the private and from the social point of view, under present conditions this might be due to the existence of widespread external economies in the North but not in the South. To the extent that such externalities could be duplicated in the South (by sufficiently large and diversified investments), this outflow of resources could still be regarded as harmful to the development of the South. In this case, again, there would be no conflict between regional and national economic goals. Finally, it could be pointed out that if these resources are more productive in the North, both privately and socially (something which we do not know for sure, and to which I will return in subsequent chapters), we should still allow them to flow to the North and bribe the South into tolerating it (for

¹To see if this is indeed the case, shadow prices for factors in the South would have to be calculated and then compared to actual factor prices in the North. This is extremely difficult to do. H. B. Chenery has done some work (not entirely successful) along these lines, as will be mentioned later.

example, by relief programs in the South, reduction in its fiscal pressure, etc.).¹ However, this would concentrate most of the national production in the North, while the South would be living on a dole. Some loss of efficiency might be acceptable (even from a national point of view) in utilizing these resources within the South--particularly now that the North has achieved a certain degree of opulence (a per capita income of over 1300 dollars per year). To the extent that this is done, however, the goal of maximum national growth will be sacrificed for the sake of possibly reducing regional inequalities between the North and the South. And economists cannot be insensitive to such non-economic necessities. Modern notions of welfare involve the provision of a certain basic amount of education to all people--even those who will probably never become part of the labor force and ensuring a certain minimum of welfare assistance to the needy, the aged, the sick, even if there are "better" (economically more productive) ways on which to spend resources. Similarly, in the case of present day Italy, the national fabric might not survive the strain imposed by widening inequalities between the North and the South after one century from unification--especially if this increased inequality (or lack of reduction in inequality) were to be based, even in part, on a transfer of productive

¹In Chapter II, I will expand this argument to include a discussion of the possibility of regional specialization, etc.

resources from South to North. All that I am saying here is that there might be non-economic reasons to retain these resources in the South. I am not necessarily advocating the obstruction to such a resource transfer. Anyway, this question is not my overriding concern, at least in the first part of the dissertation. What I am primarily interested in establishing is whether or not the market mechanism, if left on its own, has operated or can be expected to operate in a way which is detrimental to the South (Backwash Effects exceed Spread Effects) regardless of whether or not these same resources would be more productive in the North.

Whether the flow of resources (whichever its direction) should be stopped, increased, reversed, or allowed and compensated for--these are questions which can rationally and intelligently be asked only after the direction and size of the flow is first established, and to determine the direction and size of such a resource flow and its effect on the South is the logical first step that I intend to take in Chapters III-VI of this dissertation. To be noted is that the changed availability of developmental resources to the South resulting from the unhampered operation of the market mechanism is only one facet of the overall picture to be considered. Backwash and Spread Effects also include more dynamic aspects of the problem that will be discussed in Chapter II.

The above was simply introduced as an example of the basic conflict which may arise from taking a regional rather than a national viewpoint. Only in the last case discussed was there a conflict between regional and national goals--a conflict, we may add, that arises exclusively because of the possibility and desirability of society setting non-economic goals.

Reasons for Writing this Dissertation

The most important reasons for writing this dissertation are as follows:

a) Myrdal, Hirschman and others are emphatic in their belief that the unhampered operation of the market mechanism redistributes resources from poor to rich (in addition to more dynamic harmful effects on poor areas) and it is thus the purveyor of greater regional and national inequalities in the living standards between the developed and the underdeveloped countries and regions of the world. This conclusion is based almost entirely on theoretical speculation. My feeling, however, is that this is primarily an empirical question. But when we naturally turn from theoretical speculation to empirical application, we are surprised by the complete absence of systematic empirical studies on the overall (rather than just terms of trade, migration, etc.) effect of the unhampered operations of the market mechanism on the development of backward areas. This dissertation cannot fill such an empirical vacuum, but it is

at least a beginning. That is, one of the primary reasons for undertaking this research project is to show, for one concrete case, whether the overall, unhampered operation of the market mechanism can be relied upon to increase or drain the development potential of an underdeveloped area, and thus be the basis for narrowed or enlarged regional inequalities. Only after this question is settled, can we logically and rationally decide on how and by how much we want to modify the operation of the market mechanism (stop the resource flows or allow it but compensate for it, give subsidies to encourage the establishment of industries in the South, etc.) if we deem it desirable.

b) The central hypothesis of the dissertation lends itself to empirical verification. To the extent that it is empirically verified, it could then be used for prediction (in the Italian context).

c) In such a topic as the one proposed, an analysis of human capital (along the direction of Conrad, Becker, Fei and Ranis, and W. A. Lewis) must, of necessity, occupy a very important and crucial position, and analysis of human capital is an area which is new, interesting, worth exploring.

d) Another reason for deciding on this topic is related to the preceding discussion on regional theory. The question might have been asked as to whether it would not have been better (less costly) from the national point of view to push for an even higher growth of the North (that

is, to divert resources presently raised and spent in an effort to develop the South, to increase the growth rate of the North) and forget about the South (that is, to take a national rather than a regional approach). Wouldn't this represent a better strategy for national growth? A more important topic for a dissertation? There is, I think, no a priori answer to the former question: it is an hypothesis which needs to be tested and could, in its own right, be the central hypothesis of the dissertation. It is, however, an idle question as far as the development of the Italian South is concerned because the central government in Rome has already and irrevocably decided that even if it may prove more costly from an economic point of view, it would actively push for the development of the Italian South. This, it has decided out of considerations that lie more properly in the fields of politics and sociology than in the field of economics. Since the government has already decided on its course of action (from which there is no going back, if for no other reason because the electorate of the South would never allow it), I have decided not to pursue this topic, interesting and important as it would have been in other circumstances. (The economist, of course, would still be justified in estimating the excess cost, if any, of pursuing the present policy rather than its alternative, but that would not be a positive contribution, since in economics we believe that by-gones are by-gones.) I have thus chosen to take a regional, rather than

a national viewpoint in my dissertation because of the distinct opportunity which it offers to influence decisions being made at the present (or which will be made in the near future) regarding the development of the Italian South. More candidly, the choice of my topic was strongly influenced by the belief that economics should not be studied for its inherent beauty but because of its importance in solving real world problems and in deciding upon alternative courses of action--when the choice is still open. The question of whether it would be economically sounder to forget about the South and to concentrate instead on the North (that is, take a national viewpoint)--though not the topic of the dissertation--is still an important question and will be discussed "en passant" throughout this dissertation.

Content of the Rest of Chapter I

The rest of Chapter I deals with the historical background leading to the existence of a very sharp dual economy in Italy, by 1951. After a discussion of the geography of the South, I will present the following topics: the North-South gap (in favor of the North) at the time of unification, in 1861; the North-South gap in 1951; reasons for the widened gap; the steps taken by the government from 1861 to 1951 to eliminate this gap.

Content of Each of the Subsequent
Seven Chapters

In Chapter II the theoretical foundations will be laid out. First, Myrdal's Backwash and Spread Effects and Hirschman's Polarization and Trickle-Down Effects will be presented and a theoretical comparison of the two made. Then, the broad and unrigorous theoretical strokes painted by Myrdal and Hirschman will be corrected for their inconsistencies, extended in their coverage, and presented in more specific, detailed and concrete way so as to render their theory more amenable to statistical measurement. Finally, the applicability of this revised theory and of the central hypothesis of the dissertation to the Italian case and to other countries with similar dual economies-- will be considered.

Chapter III deals with the movement of people. After a theoretical discussion, data will be presented to establish the size and the socio-economic characteristics of this flow of people; then, by economic analysis it will be determined if such a flow, or what part of it, has been detrimental to the development of the South (Backwash Effect) and what part of it beneficial (Spread Effect). Finally, the net effect of such a flow on the development of the South will be assessed for the period under consideration (1951-1968).

In Chapter IV, the movement of capital will be considered: the outflow of savings from the South, the inflow

of Northern private capital into the South, remittances to the South from emigrated labor, abandonment of fields and houses in the South. Again, as in Chapter III, I will begin with a theoretical discussion of each of these flows; I will present data on the size and characteristics of each; following this, I will determine by economic analysis the net effect of these capital movements, first separately, then aggregatively, on the availability of developmental resources in the South, in the post-war period.

Chapter V deals with the last of the aggregate flows: the movement of goods. The interregional flow of agricultural products and manufactured goods will be treated separately. The presentation of the data on these flows will be preceded by a theoretical discussion. The data will then be analyzed to determine the net effect of these movements of goods on the development of the South--again, for the period 1951-1968.

Chapter VI considers: the net effect of the interregional movement of people, capital, and goods on the average per capita income in the South and on the structure of its economy; the interaction between the various Backwash and Spread Effects; and the qualitative effects on the South resulting from it being part of a nation which includes a more developed region (how much the North dominates the South and is shaping the country now, etc.). Thus in Chapter VI, the net effect of all the Backwash and Spread Effects, from both a static and dynamic point of view, both

quantitatively and qualitatively--will be considered so as to obtain an overall picture of the effect on Southern development arising from the unhampered operation of the market mechanism.

In Chapter VII I will examine the size and pattern of past government's efforts (ordinary and extraordinary, i.e. of Cassa) to develop the South; hence I will compare this total to the excess (if any) of the Backwash over the Spread Effects (as found in Chapter VI). By doing this I will determine the overall effect on the development of the South (the net effect of the unhampered operation of the market mechanism and the total government aid extended to the South). From this I will bring out the policy implications. I will evaluate the various policy alternatives to develop the South: those adopted by the Italian Government, the ones suggested by others (e.g. Vera Lutz), and the policies that I advocate and consider most appropriate in the light of the findings of Chapters III, IV, V, and VI.

Chapter VIII would be a conclusion. In it I would state the main conclusions reached and the new policy suggestions introduced.

Historical Background

Geography

Present day Italy covers an area of 301,220 square kilometers (117,000 square miles) and is subdivided into

20 regions and 93 provinces. Because of historical, social, and economic similarities among a number of regions, it is often advantageous, from an analytical point of view, to group regions into larger, more or less, homogeneous areas. Thus we could talk about the North, the Center and the South; the Northwest, the Northeast, the Center, and the South; the Northwest, the Northeast-Center, and the South; or simply North and South. From an economic point of view, the last two classifications are most meaningful.

The Northwest, which includes the regions of Valle d'Aosta, Piedmont, Lombardy and Liguria, is by far the most developed and richest part of Italy. It includes the industrial triangle of Turin, Milan, Genoa. Its per capita income is as high as that of England, Germany and France. The regions of the Northeast (Trentino Alto Adige, Friuli-Venezia Giulia, Veneto, Emilia-Romagna) and Center (Toscany, Marche, Umbria, Latium) are very similar to one another as to socio-economic characteristics (and for this reason it is most appropriate that they should be considered together) but are less developed than the Northwest. As to level of development, real per capita income, etc. their relation to the Northwest is like that of Japan to Germany. The most important cities are Venice and Bologna (Northeast) and Florence and Rome (Center). Regardless of the way in which the rest of Italy is subdivided, the South is always taken separately. It includes the regions of Campania, Abruzzi, Molise, Apulia, Basilicata, Calabria, on the mainland, and

the islands of Sicily and Sardinia. It is a fairly homogeneous area; from an historical point of view--it formed (with the exception of Sardinia) the old Bourbon Kingdom of the Two Sicilies, with Naples as its capital, which was annexed to Italy, in its entirety, in 1861; from a developmental point of view--it is the poorest and most agricultural area of Italy. Its present real per capita income and general level of development is very similar to that of present day Spain, Portugal, Greece and Argentina (see Map 1). Although there is a fairly clear cut distinction as to level of development between the Northwest vis-à-vis the Northeast-Center, they will be considered as a single area (and henceforth referred to as "North-Center," or more simply as "North") in this dissertation. The reasons for doing this are several: first of all, I am primarily interested in the South and its relation to the rest of the nation; secondly, there is a sharper difference between the South and the Northeast-Center than between the latter and the Northwest (for one thing, the Northeast-Center has achieved take-off some time ago--to use Rostow's term--while the South has not); finally, a great deal of the regional data is available only according to a North-South classification. I am by no means the only one to use such a dual classification; the most analytical studies on



the subject have also adopted such a dualistic approach.¹

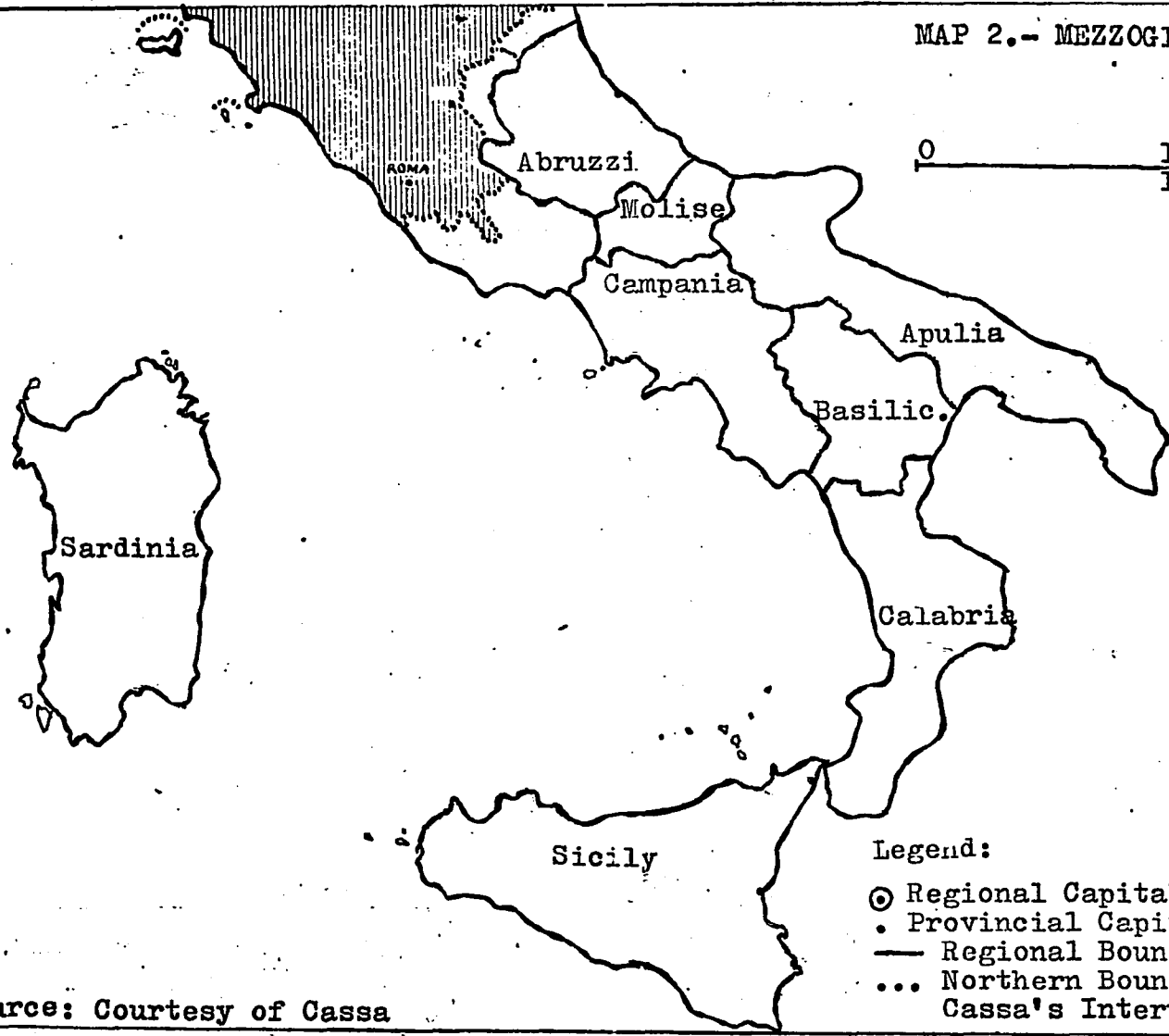
To summarize and conclude: the South or Mezzogiorno includes eight out of the twenty regions and thirty-two out of the ninety-three provinces into which present day Italy is subdivided, and it occupies an area of 123,000 square kilometers (47,000 square miles) equal to about 40% of the total national surface area. La Cassa per il Mezzogiorno (Agency for the Development of the South) operates over an area slightly larger than the above definition of the South since it includes the provinces of Latina and Frosinone and part of the province of Rieti, in Latium, part of the province of Ascoli Piceno, in southern Marche, and a few very small Tyrrhenian islands. This increases the area of the South by 2.8% so that it now becomes about 43% of the total area of Italy² (see Map 2). Unless otherwise specified, however, by "South" I will mean only the eight regions listed above (because this is the way the data is given). The distortion introduced is very slight, and all researchers on Southern Italy have followed this course.

¹Vera Lutz, Italy - A Study in Economic Development (New York: Oxford University Press, 1962), and Hollis B. Chenery, "Development Policies for Southern Italy," The Quarterly Journal of Economics, LXXVI (November, 1962), 515-47.

²SVIMEZ, I Quattro Mezzogiorno, LXXIV (May, 1961), 3-6.

MAP 2.- MEZZOGIORNO

0 100 Miles
162.8 Km.



Source: Courtesy of Cassa

Legend:
⊙ Regional Capital
• Provincial Capital
— Regional Boundry
... Northern Boundary of Cassa's Intervention

North-South Gap at the Time of Unification

The Census of 1861, taken immediately after unification,¹ shows that the structure of the economy of the South was at this time remarkably similar to that of the North:

TABLE 1
OCCUPATIONAL DISTRIBUTION OF THE WORKING POPULATION,
IN 1861, IN PERCENTAGES

	North	South	Italy
Agriculture	57.3	57.2	57.3
Industry (Includes Transportation and Communications)	25.8	30.4	27.6
Other	<u>16.9</u>	<u>12.4</u>	<u>15.2</u>
Total	100.0	100.0	100.0

Source: B. Higgins, Economic Development (New York: Norton, 1959), p. 77.

The above figures show that the South was slightly more industrial than the North. It must be noted, however, that by "industry" here is meant mostly those handicrafts such as food processing and textiles, which are a normal complement of primarily undeveloped and agricultural societies and which supply only the communal or at most the regional market. Modern, large scale industry, comparable to that of England of the times, was not a really important

¹The official date of Italian political unification is 1861, though the region of Veneto and the City of Rome did not become part of Italy until 1866 and 1870, respectively.

element in either the North or the South in 1861.¹

The national real per capita income in 1861 was 161,000 Lire (\$258), in 1963 prices.² There are no corresponding official estimates for the North and South. There is, however, general agreement among economic historians that the North had higher real per capita income than the South at this time. Thus R. Eckaus estimated that the real per capita income of the North was from 15% to 25% higher than in the South, in 1861.³ There is, of course, no way to check how accurate this estimate is. If the lower limit of 15% were close enough to reality, it would not have represented an unduly large divergency. Regional income differences in today's most developed countries such as the United States, England, France, Germany, etc. are about this order of magnitude.⁴ Since the structure of the economy of the North and the South was almost identical, this difference in per capita income could only have been based on

¹Roberto Tremelloni, "Cent'Anni dell'Industria Italiana 1861-1961," in L'Economia Italiana dal 1861 al 1961 (Milano: Giuffre', 1961), pp. 187-230.

²Giuseppe De Meo, "Evoluzione Storica delle Forze di Lavoro in Italia," Giornale degli Economisti (Luglio-Agosto, 1969), p. 414.

³Richard S. Eckaus, "The North-South Differential in Italian Economic Development," Journal of Economic History, XX (September, 1961), 285-317.

⁴For the U.S. see: H. O. Nourse, Regional Economics (New York: McGraw-Hill, 1968), pp. 196-202; for the E.E.C. members: C. Vannutelli, "Labor Costs in Italy and the E.E.C. Countries," Banca Nazionale del Lavoro, Quarterly Review, (December, 1964), pp. 3-30.

productivity differences. It is very likely that productivity was higher in the North in both agriculture (due primarily to more fertile land) and industry (due to the more widespread use of machinery and to locational advantage in importing industrial raw materials). Thus the South, with 39% of the agricultural labor force of Italy, had an average annual gross agricultural output of 32%, for the years 1855-1860.¹ By 1860, at the eve of political unification, the South had achieved a degree of industrialization which was fairly adequate for the times (especially when compared to the North). The industries of Naples were not inferior as to variety (food processing, silk, textile, engineering) and scale to those of Milan, Turin and Genoa. However, the greater tariff protection on Southern than on Northern industries can be taken as evidence that the industries of the South were less efficient than those of the North leading to lower industrial wages and incomes in the South.²

Rather than look at the absolute differentials in per capita income already existing between the North and South in 1861 (something on the size of which we can only speculate), I believe it is more important, instructive and fruitful in order to explain the future course of Southern

¹R. S. Eckaus, "The North-South . . . ," 294.

²Friedrich Vöchting, "Industrialization or 'Pre-Industrialization' of Southern Italy," Banca Nazionale del Lavoro, Quarterly Review, V (April-June, 1952), 67.

development if we compared the two regions as to the existence of infrastructures and other socio-economic pre-conditions so essential to further development. It is here that the disadvantage of the South in relation to the North becomes indisputable. As the following tables indicate, the South was much less endowed with railroads and highways than the North.

TABLE 2

RAILROAD MILEAGE (IN KILOMETERS) IN NORTH AND SOUTH IN 1861

	Tot. Mileage	Per 100,000 Inhab.	Per 1000 km. ² of Area
North	2,336	15.3	14.5
South	184	1.9	1.5
Italy	2,520	10.1	8.8

Source: SVIMEZ, Un Secolo di Statistiche Italiane: Nord e Sud 1861-1961 (Roma, 1961), p. 477.

TABLE 3

HIGHWAY MILEAGE (IN KILOMETERS) IN NORTH AND SOUTH IN 1863

	Tot. Mileage	Per 100,000 Inhab.	Per 1000 km. ² of Area
North	71,127	442	620
South	14,832	157	17
Italy	85,959	336	331

Source: Elaborated from figures presented by R. Eckaus, "The North-South . . . ," 291.

It is true that the geographic configuration of the South makes maritime transport easier than in the North; nevertheless, the small mileage of railroads and roads in the South is an indication of the isolation of internal areas of the South making the spreading of developmental stimuli from coastal cities much more difficult.

In the important area of education, the North was in a better position than the South: in 1861, 33% of the people over 6 years of age living in the North could read and write; the corresponding figure for the South was 13%.¹ In addition, while Northern industries were almost invariably run by Northern private entrepreneurs, most of Southern enterprise was either established and run by foreign entrepreneurs (English, German, Swiss) or state-sponsored.² The North also had relative to its size, population and level of industrialization in 1865 many more incorporated business than the South (262 as opposed to 43), and a great deal more in corporate investments (710 million dollars as opposed to 20).³ Finally, in the North there existed a less rigid socio-economic structure and a more favorable ideological climate for the acceptance of new methods of

¹SVIMEZ, Un Secolo di Statistiche Italiane: Nord e Sud 1861-1961 (Roma, 1961), p. 795.

²United Nations, Commission for Europe, Economic Survey of Europe (Geneva, 1953), p. 131.

³SVIMEZ, Un Secolo . . ., p. 616.

production, new techniques and new forms of organization.¹

To summarize and conclude: real per capita income was somewhat lower in the South than in the North, in 1861. However, this gap may not have been based, as sometimes alleged, on the North being industrial and the South being agricultural (only the lightest touch of industrialization in the North had disturbed the handicraft system of production which still prevailed throughout Italy), but, instead it may have been due to the fact that productivity was higher in the North--in both industry and agriculture. More important than this possible difference in productivity, real per capita income and level of industrialization existing between the North and the South in 1861, was the difference between the two regions in the physical, social and economic infrastructures and preconditions necessary for further development. The disadvantage of the South in this respect was clear-cut. The seeds for regional dualism were planted before 1861.

North-South Gap in 1951

As the following tables show, the position of the South vis-à-vis the North had greatly deteriorated by 1951.²

¹S. B. Clough and C. Levi, "Economic Growth in Italy: an Analysis of the Uneven Development of North and South," Journal of Economic History, 1965-1966, pp. 343-48.

²1951 is usually taken as the year in which war reconstruction ended. By this time agricultural and industrial production in both the North and the South had achieved the prewar level of 1938.

Looking at Table 4, we see that in 1951 the South had 37% of the national population but only 33% of the employed labor force. The ratio of the employed labor force to total population was 44% for the North, 37% for the South and 42% for the nation as a whole. The relatively low share of the Southern population in the labor force was due to several reasons: first, in the migration prior to 1951, the ratio of the number of workers emigrating to the total number of emigrants was much higher than the ratio of the number of workers in the labor force to the population of the South as a whole; second, the much higher birth rate¹ in the South than in the North led to a higher dependency rate² in the South; third, the smaller employment opportunities in the South led to a higher rate of unemployment (as will be seen later) but also discouraged many potential members of the labor force to enter the job market; finally, social conditions in many of the most backward parts of the South (especially in Sicily) discouraged women from working for others.

If we then turn to the sectoral distribution of the employed labor force we find that in the South 57% was in agriculture, 20% in industry and 23% between services and public administration. The corresponding figures for the

¹See Table 37 in Chapter VII.

²The dependency rate is here being defined as the number of people under 15 plus the number of people over 65 divided by the number of all other people.

TABLE 4

POPULATION PRESENT, EMPLOYED POPULATION, AND SECTORAL DISTRIBUTION
OF THE LABOR FORCE, IN THE NORTH AND THE SOUTH, IN 1951

	(1) North	(2) South	÷ (3) Italy	Ratio of (2) (3) (Per Cent)
A. Population				
1. Population Present ('000)	29,725	17,434	47,159	37.0
2. Employed Population ('000)	13,202	6,491	19,693	33.0
3. Ratio of (2) ÷ (3) (in %)	44.0	37.2	41.8	--
B. Sectoral Distrib. of Employed Pop. ('000)				
1. Agriculture	4,961	3,679	8,640	42.6
2. Industry exclud. Transp. & Communic.	4,497	1,306	5,803	22.5
3. Service	2,985	1,127	4,112	27.4
4. Public Administration	759	379	1,138	33.3
C. Sectoral Distrib. of Employed Pop. (in %)				
1. Agriculture	37.6	56.7	43.9	--
2. Industry	34.1	20.1	29.5	--
3. Service	22.6	17.4	20.9	--
4. Public Administration	5.7	5.8	5.8	--
Total	100.0	100.0	100.0	

Source: For A.1: ISTAT, IX^o Censimento Generale della Popolazione, 4 November 1951, Dati Generali Riassuntivi (Roma, 1958), pp. 144-64.

Rest: ISTAT, Occupazione in Italia negli Anni 1951-1965, Supplemento Straordinario al Bollettino Mensile di Statistica, N. 12 (Dicembre, 1966), pp. 27, 17, 26; and N. 8 (Agosto, 1966), p. 13.

North were 38%, 34%, and 28%. Comparing these figures to those for 1861 presented earlier (though some problem of comparability arises), we note that while the sectoral distribution of the labor force in the two regions was very much the same in 1861, by 1951 the North had become much more industrial while the South had remained predominantly agricultural.

Turning to Table 5 we note that while 33% of the employed labor force was in the South, this region had only 26% of the net national output or 28% of the national "income" (which for lack of a better term, I here refer to net national output plus transfers from outside). The net output, in terms of 1963 prices, available per person living in the South was less than 60% than that of the North--334 dollars as opposed to 561 (see Table 6). Thus the gap between the two parts of the nation which in 1861 ranged from 15 to 25% (as estimated by Eckaus) increased to over 40%, 90 years later. This difference remains very large even if the qualification is added that the South, being much more agricultural than the North, has a larger non-commercial sector. The gap is also larger than the one existing in 1951 between the richer and the poorer parts of other developed nations. For example, if we divide the United States into a richer part (including New England, Mideast, Great Lakes, and Far West) and a poorer part (including the rest of the nation), we find that the real per

TABLE 5

NET REGIONAL AND SECTORAL OUTPUT, IN 1951

	(1) North	(2) South	÷	(3) Italy	Ratio of (2) (3) (Per Cent)
A. Net Regional and Sectoral Output in 1951, at 1963 Prices, in Million of Dollars					
1. Regional Output at Market Prices	16,670	5,823		22,493	25.9
2. Agricultural Output at Factor Cost	2,688	1,752		4,440	39.5
3. Industrial Output at Factor Cost	4,726	1,080		5,806	18.6
4. Output of Service Sector at Factor Cost	5,266	1,585		6,851	23.1
5. Output of Public Admin. at Factor Cost	2,265	1,153		3,418	33.7
6. Regional Output at Factor Cost	14,945	5,570		20,515	27.2
B. Sectoral Output at Factor Cost in 1951, at 1963 Prices, in Per Centage					
1. Agriculture	18.0	31.4		21.6	--
2. Industry	31.6	19.4		28.3	--
3. Service	35.2	28.5		33.4	--
4. Public Administration	15.2	20.7		16.7	--
C. Net Regional "Income"* in 1951, at 1963 Market Prices, in Million of Dollars					
	16,242	6,403		22,645	28.3

*Regional Income is here defined as Net Regional Output at market prices plus Transfers from outside.

Source: Elaborated from: ISTAT, I Conti Economici Nazionali e Territoriali dell'Italia, Anni 1951-1965, Supplemento Straordinario al Bollettino Mensile di Statistica, N. 12 (Dicembre, 1967), pp. 25, 30, 70-71, 16-18.

TABLE 6

INDICATORS OF ECONOMIC DISPARITY BETWEEN SOUTH AND NORTH IN 1951, NET OUTPUT
PER PERSON PRESENT AND PER WORKING PERSON

	(1) ÷ North	(2) ÷ South	(3) ÷ Italy	Ratio of (2) (3) (Per Cent)	Ratio of (2) (1) (Per Cent)
A. Net Sectoral Output, Per Person					
Working in Sector, at Factor Cost, in 1963 prices, in Dollars					
1. Agriculture	542	476	509	93.5	87.8
2. Industry	1,051	827	1,001	82.6	78.7
3. Services	1,734	1,406	1,666	84.4	81.1
4. Public Administration	2,984	3,042	3,000	101.4	101.9
5. Services & Public Administration	2,011	1,818	1,956	92.4	90.4
B. Net Output and "Income" at 1963					
<u>Market Prices</u> , in Dollars					
1. Regional Output Per Person Present	561	334	477	70.0	59.7
2. Regional Output Per Person Employed	1,263	897	1,142	78.5	71.0
3. Regional Income Per Person Present	546	399	480	83.1	73.1

Source: Elaboration on Tables 4 and 5.

capita income of the poorer part was in 1950 equal to about 74% of that of the richer part.¹ What is even more important is that while this difference has decreased in recent years in the U.S.² and in other developed nations,³ it has increased in Italy.⁴

If we look at the sectoral productivities, we find that the net output (at factor cost and in 1963 prices) per employed worker in the South was 88% that of the North in agriculture, 79% in industry, and 90% in services and public administration (see Table 6). Thus the gap in the net output available per person between the South and the North was due partly to the higher dependency rate and partly to the lower productivity in the South than in the North. The lower productivity of the poorer region in all sectors resulted from the fact that the South has less capital per

¹Hugh O. Nourse, Regional Economics (New York: McGraw-Hill, 1969), p. 146.

²Ibid.

³United Nations, Commission for Europe, Economic Survey of Europe (Geneva, 1954), pp. 136-144.

⁴Compare Table 6 in this chapter with Table 41 in Chapter VII. However, a likely explanation for this is that at an earlier stage of development (Italy), regional inequalities increase, while at a later stage (U.S., England, Germany, etc) they decrease. Still part of the puzzle remains: the North is as developed as England, Germany, and France, yet North-South inequalities continue to increase, when, looking at the experience of these other nations, we would be led to predict that they should be decreasing--by now.

worker, was using a less advanced technology,¹ and had a less skilled labor force than the North.

As the following table shows, the capital per worker in the South was much lower than that of the North-- particularly in industry.

TABLE 7

CAPITAL PER WORKER, PER SECTOR, PER REGION, IN 1951,
AT 1963 PRICES, EXPRESSED IN DOLLARS

	Northwest	Northeast-Center	South	Italy
Agriculture	6,547	3,496	3,004	3,812
Industry	4,264	3,502	1,475	3,201
Service	4,368	4,091	3,211	3,680
Overall	4,711	3,633	2,700	3,644

Source: ISTAT, Annali di Statistica, Serie VIII, XV (Roma, 1965), 296.

Not only did Southern industrial firms use less capital per worker but they were also, on the average, much smaller than their Northern counterpart.² The following figures from the 1951 Industrial Census are indicative of this:

¹Lutz, Italy - A Study . . ., pp. 3-12.

²The relatively smaller Southern industrial firms may thus have been unable to take advantage of internal economies of scale (to the extent that internal economies of scale were operating in the various industries and over the scale of plants here being considered).

TABLE 8

PERCENTAGE DISTRIBUTION OF THE INDUSTRIAL LABOR FORCE IN
THE NORTH AND SOUTH, PER FIRM SIZE, IN 1951

Employed in Firms with:	10 Employees or less	From 10-100	From 100-1000	Over 1000
North	22.8	23.7	25.6	27.9
South	57.6	21.4	13.4	7.6
Italy	27.9	23.4	23.8	24.9

Source: SVIMEZ, Un Secolo . . . , p. 341.

In addition, the industrial use of electricity was 542 kWh per inhabitant in the North in 1951, 101 in the South and 378 for the nation as a whole.¹ To the extent that modern industry is characterized by a high K/L and Power/L ratios, and large scale operation, it should not be surprising to find Southern industries to be in general less productive than Northern ones.

In agriculture the smaller amount of capital per worker in the South was reinforced by more adverse climatic and topographical conditions making Southern agriculture less remunerative than that of the North. In the North rainfall is more evenly distributed over the year; in the South it concentrates in the winter months leaving a very dry summer. Also, the absence of glaciers in the South, but not in the North, makes most of its rivers either dry

¹SVIMEZ, Fenomeni Economici Caratteristici al Nord e Sud D'Italia - 1950-1960, N. 76 (Roma, Maggio 1962), p. 38.

in the summer or carry a very low water flow which is insufficient for irrigation purposes. Thus the South had less than 300,000 hectares of irrigated land to the North's 2,000,000 hectares.¹ Finally, as the following table shows, the cultivated land of the South is more hilly and hence less suitable to many forms of cultivation than that of the North:

TABLE 9

ALTIMETRIC ZONES OF CULTIVATED LAND; PERCENTAGE DISTRIBUTION

	Mountain	Hill	Plain	Total
North	42.4	31.6	26.0	100
South	31.1	54.1	14.8	100
Italy	37.6	41.1	21.3	100

Source: SVIMEZ, Un Secolo . . ., p. 150.

The fractionalization of land in uneconomically small farms was not a factor contributing to the relative poverty of Southern in relation to Northern agriculture since it was equally prevalent in both regions.

Other indicators of the poverty and of the social backwardness of the Italian South are provided by 1951 statistics on unemployment, birth rate, education, housing, consumption, motor vehicles, roads, and new savings. The South with 33% of the national labor force accounted for

¹SVIMEZ, Un Secolo . . ., p. 4.

36% of the very large national unemployment figure (of 2,120,000)¹ and for 42% of the total number (of 4.1 million) of the marginally employed. (In Italian statistics, a person is defined as marginally employed if he works less than 32 hours per week during the year.)² The percentage of illiterates to the total population was 24 for the South, 6 for the North and 13 for Italy as a whole.³ In housing, the number of persons per room was 1.8 for the South, 1.2 for the North, and 1.4 for the nation as a whole.⁴ In the North, the consumption of meat per capita was 20 kg per year, of sugar 17 kg. of milk 68 liters; the corresponding figures for the South were 9, 7, and 16, respectively.⁵ The household consumption of electricity per capita was 111 kWh in the North in 1951, 33 in the South, 89 for Italy. There were 31 telephones per 100 persons living in the North but only 6 in the South.⁶ Of 425,000 cars in existence in Italy in 1951, 350,000 were in the North to 75,000 in the South. The North had 720 km. of roads per 1,000 km² of land area or 432 per 100,000 inhabitants, the South had

¹Allesandro Molinari, "Unemployment Statistics in Italy," Banca Nazionale del Lavoro, Quarterly Review (April, 1952), p. 78.

²ISTAT, Occupazione in Italia negli Anni 1951-1965, N. 12, p. 27.

³SVIMEZ, Un Secolo . . . , pp. 79, 795.

⁴Ibid., p. 130.

⁵United Nations, Commission for Europe, Economic Survey of Europe (Geneva, 1952), p. 124.

⁶SVIMEZ, Fenomeni Economici Caratteristici . . . , pp. 22-24.

half that amount. (Of railroads, when measured by Km per 1,000 km² of land area or by km per 100,000 inhabitants, the South was equally endowed as the North.)¹ Total gross investment per capita made in the South during the year 1951, was about 35 dollars, in the North 80 dollars. Total corporate investments in the North in 1951 was over 3 billion dollars at 1963 prices, in the South about 200 million.²

Thus whether one is speaking of the structure of the economy, total or sectoral output or income, capital per worker, the level of unemployment, birth rate, education, housing, consumption, cars, roads, new investments, or almost any conceivable index of the development of the South in relation to that of the North--we find conditions in the South significantly below the national average. As a result there were in 1951 two Italies--one rich, one poor; one industrial, one agricultural; one that had successfully achieved take-off, the other that was still in the pre-conditions stage.³ The gap that already existed between the North and the South at the time of unification had, by 1951, become an abyss. Thus, after reconstruction from the damage of the war had been accomplished in 1951, the development of the South was Italy's most urgent economic concern since

¹SVIMEZ, Un Secolo . . . , p. 477.

²SVIMEZ, Fenomeni Economici Caratteristici . . . , pp. 20, 12.

³In the sense that growth had not yet become self-sustaining. More explicit justification for this statement will be found in Chapter VII.

there was a growing conviction that an economically backward area was a blight on the nation.

Reasons for the Widened Gap

The reasons for the widened gap between the North and the South from 1861 to 1951 are to be found in the following factors: (1) The South was in 1861 much less prepared for further development than the North, (2) the operation of the market mechanism might have operated to the disadvantage of the South, (3) the national tariff policy of the new unified state, (4) its tax policy, (5) the much faster natural increase in the population of the South than in the North, (6) the much more extensive war destruction in the South than in the North. I will now briefly discuss each.

(1) We have seen that in 1861, there already existed an actual productivity gap between the North and the South. It was also noted earlier that perhaps more important than this actual gap was the fact that the South, at the time of unification, lacked many of the physical infrastructures and social preconditions so necessary for further development. For this reason alone it might have been expected that the gap would more or less have widened, unless the national government forcefully moved to make up quickly and completely for these deficiencies, and unless the market mechanism operated in a way which was advantageous to the South. What the government did to help to bring the South

to the North's level (as to preconditions for development) will be seen in the next section.

(2) It is at least a possibility that the unhampered operation of the market mechanism might have been detrimental to the development of the South by draining it of some of its development potential. Whether in fact this contributed to the enlarged gap between the two regions, and if so how important a contributing factor it was--these questions cannot now (and probably will never) be answered because of the lack of regional data on this earlier period of Italian history. (The first official regional data were not published till 1951.) To see what effect this factor had on the development of the South during the period 1951 to 1970 is one of the primary aims of this dissertation, and, though the market mechanism might have different effects in different time periods and under different conditions, some inference as to how it operated before 1951 might be deduced by how it will be found to have operated in the more recent past.

(3) One of the first steps taken by the government of the new unified nation was to abolish the many trade barriers that separated the eight independent states which were combined to form Italy. Since Northern industries were in general more efficient than those in the South, it is obvious that in general Southern industries would suffer and that some of them would be forced out of business as a

result of political unification. This potentially very harmful development must have been moderated, however, at least in the first few decades from unification, by the natural protection provided by the almost complete absence of land communications within the South. Later, as railroads started to be constructed at a very rapid rate both in the North and in the South, and transportation costs began to fall, the pressure of Northern competition on Southern industries was intensified. Only certain industries which catered to specifically local needs such as furniture, shoes, apparel, bricks, etc., remained relatively unaffected, while industries producing new products almost invariably tended to settle in the North (because of locational and other advantages). Thus in the South, the industrial labor force, after remaining at about 1.9 million from 1861 to 1881, actually fell to 1.1 million by 1901.¹ By 1936, the structure of the Southern economy had become very different from that of the North and was rapidly approaching the structure that had emerged by 1951. The table that follows (taken from the 1936 Census of Population) gives these figures:

¹United Nations, Economic Commission for Europe, Economic Survey . . ., p. 133.

TABLE 10

COMPOSITION OF THE WORKING POPULATION IN 1936 - PERCENTAGES

Occupation	North	South	Italy
Agriculture	44.0	56.9	48.1
Industry (including Transp. and Communic.)	36.8	27.7	33.9
Other Activities	<u>19.2</u>	<u>15.5</u>	<u>18.0</u>
Total	100.0	100.0	100.0

Source: B. Higgins, Economic Development, p. 77.

The tariff policy of the new state was more directly harmful to the South. Following a period of relatively low external duties, the new state imposed, in 1887, a much higher tariff on the importation of manufactured goods and on certain agricultural goods--particularly grains. This hurt the South in two ways: it raised the price that this predominantly agricultural region had to pay to obtain manufactured goods, and it stimulated the production of wheat and corn--crops which are ill suited to the climate and soil of Southern Italy. Later, from 1934 till 1940, the autarkic policies of the fascist regime, under the slogan of the "battle for wheat," intended to make Italy self-sufficient in grains, further reinforced the harmful effects on the South of the previous trade policy by providing excessive incentive to wheat growing at the expense

of the cultivation of products which might have been more appropriate for the South.¹

(4) The level of taxation, and its form of collection, also hindered the development of the South. The proportion of national taxation raised in the South was larger than the proportion of the national wealth possessed by this region, and government expenditures in the South were less than in proportion to the taxes raised there. Thus M. Pantaleoni presented evidence in 1901 which indicated that during the decade 1880-1890, although the South had only 27% of the national wealth, it paid 32% of the taxes. These findings were confirmed by F. S. Nitti and extended to the period 1862-1897. Nitti also proved that the amount of government expenditures in the South was less than the amount of taxation which it collected there. Not only it was the poorer South that was extending direct aid to the richer North, but as another writer pointed out "there was not a single kind of tax . . . which did not involve a glaring injustice to the South." To mention only one such an injustice: Southern lands were taxed at the same rate as Northern lands, taking no account of the lower natural productivity of the Southern soil.²

¹Lutz, Italy - A Study . . . , pp. 97, 175.

²B. Caizzi, "The Main Themes of the History of the Southern Question," Banca Nazionale del Lavoro, Quarterly Review (Dicembre, 1962), p. 9.

(5) The much greater population pressure in the South than in the North was another important factor that contributed to the widened inequalities between the two parts of Italy. This is clearly shown by the following figures: between 1861 and 1936, the natural increase in the Southern population was 9.4 million. Of this total, 40% emigrated, 44% remained unemployed within the South, 14% represented the increase in children and other dependents. Only 2% (or less than 200,000) out of the 9.4 million of the natural increase in population from 1861 to 1936 found productive employment within the South! There were in 1861, 75 persons not working for each 100 persons working in both the North and the South. By 1936, this figure had become 83 in the North but 116 in the South.¹ These figures represent an incredible increase in demographic pressure.

(6) Finally, World War II proved to be much more destructive to the South than to the North. Thus, 34% of Southern total fixed capital investments (as opposed to 12% in the North) were destroyed by the war; 50% of the hydroelectric plants in Southern Italy were destroyed, but only 10% in the North.²

To conclude, the South, starting from a relatively less advantageous position than the North, harmed by

¹Pasquale Saraceno, Ricostruzione e Pianificazione 1943-1948 (Bari: Laterza, 1969), pp. 443-45.

²Vöchting, "Industrialization or . . . ," 69.

national trade and tax policies, facing tremendous population pressure, and suffering from more widespread war destruction--had, by 1951, become a mere appendage to the North; its economic relation to the richer region was to some extent like that between a metropolitan power and its colony.

Steps Taken by the Government to Eliminate the Gap

The so-called "Southern Question," or an unawareness of the relative poverty of the South together with a call for the government to redress the regional balance, arose almost immediately after unification. The resulting measures undertaken by the government on behalf of the South were rendered politically necessary and easier to start by the fact that the most successful politicians in the national government were Southerners. (Since careers in business were less promising in the South, the best minds entered the civil service.) However, all the measures taken up to 1950 were not of a magnitude nor of a kind adequate to lift the South out of stagnation and bring it up to national standards. In fact, as we have seen, the gap between the North and the South not only did not narrow, but greatly widened during this period.

The history of the government effort to develop the South falls into three distinct periods. During the first period, from 1861 to 1900, the stress was on providing the

South with an adequate network of roads and railroads and undertaking land reclamation. Thus by 1912, the South was as well provided with railroads as the North (56 km. of railroads per 1,000 km.² of land area or 48 km. per 100,000 persons living in the South; the corresponding figures for the North were 64 and 48 km., respectively). Results were less satisfactory with regard to roads. By 1910, the South had 365 km. of roads for each 1,000 km.² of land area or 307 km. for each 100,000 of population. The North had almost twice that amount: 706 and 501 km.¹ Results were negligible with respect to land reclamation. From 1861 to 1915 only 2,000 hectares of land were reclaimed in the South, against 330,000 hectares in the North.² This was not due to the relative lack of reclaimable land in the South (as figures for the subsequent period indicate), but rather to the fact that the land reclamation bill was drawn up by Northern technicians who had in mind conditions as they prevailed in the North and which were not applicable to the different situation that existed in the South.

During the second period, which covered the period 1900 to 1940, the public works program started earlier was continued, but in addition other measures were taken. First, the land tax in the South was reduced to reflect the lower natural productivity of the soil in the South than in the

¹SVIMEZ, Un Secolo . . . , pp. 477, 487.

²United Nations, Commission for Europe, Economic Survey . . . , p. 133.

North and thus equalize the real burden on farmers in the two regions. Secondly, special laws for industrial zones in the South were adopted. These granted tax exemption of the profits of new firms, custom exemption on imported machinery, reduction in rail rates, providing credit facilities, and guaranteed purchase of their output by the state. With the response to these special incentives anything but encouraging, the state directed its holding company IRI (originally set up in 1930 to rescue industrial firms in the North and South hurt by the Great Depression), to undertake certain directly productive investments such as ship building and electrical generating plants within the South.¹ Though the direct intervention and special incentives granted by the government to the South cover an impressive range of areas, the actual, quantitative aid afforded to the South, with the exception of railroad construction, was negligible. And negligible were also the results. The small amount of money spent by the government in comparison to the immense needs left practically no trace in the bottomless pit of the South. Thus regional inequalities continued to widen.

The third period, started in 1950, is still continuing today. Even before reconstruction from the extensive war damages had been completed, a new and bold approach

¹Glauco Della Porta, Sviluppo Economico Regionale - Teoria e Politica (Rocca San Casciano: Cappelli, 1963), pp. 12-13.

was started with the creation of the Cassa per il Mezzogiorno, in 1950. The flexibility granted to the Cassa and the amount of money endowed it makes this development a new departure in the government aid to bring the South up to national standards. A critical and detailed evaluation of this renewed effort will be postponed till Chapter VII.

Having completed this survey of the historical background of the problem at hand, I am now ready to tackle its underlying theoretical aspects. This will be done next--in Chapter II.

CHAPTER II

THE THEORY OF THE BACKWASH AND SPREAD EFFECTS

Myrdal's and Hirschman's Theory

Introduction

The theory of the Backwash and Spread Effects was first introduced by Gunnar Myrdal in his: An International Economy (New York: Harper and Row Co., 1956) and Rich Lands and Poor (New York: Harper and Row Co., 1957). Very briefly, this theory says that if a nation is sharply divided into a developed region (usually the North) and an underdeveloped region (usually the South), then there will be Backwash (or harmful) Effects and Spread (or beneficial) Effects as far as the development of the underdeveloped region is concerned. Albert O. Hirschman discusses similar effects (which he calls "Polarization and Trickle-Down Effects") in his: "Investment Policies and 'Dualism' in Underdeveloped Countries," American Economic Review, XLVII (September 1957), 550-570 and The Strategy of Economic Development (New Haven: Yale University Press, 1958). There are, however, some differences in approach, emphasis and conclusions between Myrdal and Hirschman. These differences

will be considered after the theory of each author will be presented separately. To this I will now turn.

Myrdal's Theory of the Backwash
and Spread Effects

Myrdal expresses his theory of the Backwash and Spread Effects very succinctly thus making it rather easy to recapture its essence. He begins by pointing out that development usually starts in certain regions of a nation because of their locational advantage or more likely because of some historical accident. Thereafter, even if the original advantage is lost, these favored regions continue to grow because of the ever-increasing internal and external economies. Their continuous growth is further "fortified and sustained . . . at the expense of other localities and regions where, instead, relative stagnation or regression became the pattern."¹ Myrdal then goes on to explain how the unhampered operation of the market mechanism drains the development potential out of the poorer regions. Thus he says:

It is easy to see how expansion in one locality has "backwash effects" in other localities. More specifically the movement of labor, capital, goods and services do not by themselves counteract the natural tendency to regional inequality. By themselves, migration, capital movements and trade are rather the media through which the cumulative process evolves--upward in the lucky regions and downward in the unlucky ones. In

¹Gunnar Myrdal, Rich Lands and Poor (New York: Harper and Row, 1957), p. 27. The underlining is mine.

general if they have positive results for the former, their effects on the latter are negative.¹

An elaboration follows to show how migration, the movement of capital, and trade operate to the disadvantage of the poorer regions. With regard to emigration Myrdal states:

The localities and regions where economic activity is expanding will attract net immigration from other parts of the country. As migration is always selective, at least with respect to the migrant's age, this movement by itself tends to favor the rapidly growing communities and disfavor the others. . . . The poverty of rural regions of Europe during the long period of net migration to the industrial centers . . . has a main explanation in the unfavorable age distribution there, caused by migration. . . .²

The movements of capital also have deleterious effects on the "unlucky" regions:

Capital movements tend to have a similar effect of increasing inequality. In the centers of expansion increased demand will spur investment. . . . In the other regions . . . the banking system, if not regulated to act differently, tends to become an instrument for siphoning off the savings from the poorer regions to the richer and more progressive ones where returns on capital are high and secure.³

Trade works in the same way:

Trade operates with the same fundamental bias in favor of the richer and more progressive regions against the other regions. The freeing and widening of the markets will often confer such competitive advantages on the industries in the already established centers of expansion, which usually work under conditions of increasing returns, that even the handicrafts and industries existing earlier in the other regions are thwarted . . . as industrialization is the dynamic force in this development, it is almost tautological to state that

¹Ibid. The underlining is mine.

²Ibid., pp. 27-28.

³Ibid., p. 28.

the poorer regions remain mainly agricultural . . . [this] will even . . . tend to frustrate earlier beginnings of industrial diversification in agricultural regions.¹

Myrdal extends and summarizes what he means by Backwash

Effects as follows:

For easy reference I shall refer to all relevant adverse changes, caused outside that locality, as the "backwash effects" of economic expansion in a locality. I include under this label the effects via migration, capital movements and trade as well as all the effects via the whole gamut of other social relations, . . . the term refers to the total cumulated effects resulting from the process of circular causation between all factors, "noneconomic" as well as "economic."²

Myrdal then moves to consider the forces which tend to counteract these Backwash Effects. He says:

Against the backwash effects there are, however, also certain centrifugal "spread effects" of expansionary momentum from the centers of economic expansion to other regions. It is natural that the whole region around a nodal center of expansion should gain from the increasing outlets of agricultural products [and raw materials] and be stimulated to technical advance all along the line. . . . If a sufficient number of workers become employed in these other localities, even consumers' goods industries will be given a spur there.³

With regard to these Spread Effects Myrdal concludes: "They represent a complication of the main hypothesis that . . . the change in other factors which are called forth as reactions by a change in one factor always tend to move the system in the same direction as the first change."⁴ Or more explicitly:

¹Ibid., pp. 28-29.

²Ibid., pp. 29-30.

³Ibid., p. 31.

⁴Ibid., p. 32.

If things were left to market forces unhampered by any policy interferences, industrial production, commerce, banking, insurance, shipping and, indeed almost all those economic activities which in a developing economy tend to give a bigger than average return--and, in addition, science, art, literature, education and higher culture generally--would cluster in certain localities and regions, leaving the rest of the country more or less in a backwater.¹

Less rhetorically: "The main idea I want to convey is that the play of the forces in the market normally tends to increase rather than to decrease, the inequalities between regions."²

Myrdal qualifies this overall conclusion by postulating that the more developed a nation, the stronger the Spread Effects in its poorer region. Despite this, the Backwash Effects normally exceed the Spread Effects even in a developed nation. The reasons why regional inequalities have tended to diminish in the more developed nations was (and is) because the interference, with the market mechanism (aid to the poorer regions) extended by the central government had to swim against much weaker opposite forces (excess of Backwash over Spread Effects) in developed countries than in underdeveloped countries; in addition, the aid that the central government of developed countries could provide to its underdeveloped regions was proportionately much larger than in the case of underdeveloped countries, and finally, the feeling of generosity and of national entity was

¹Ibid., p. 26.

²Ibid.

stronger within the more developed countries (partly because when a person is rich he can afford to be more generous) than in the less developed countries thus making possible stronger redistribution measures in favor of the poorer regions.¹

This is Myrdal's theory; let's now go on to examine Hirschman's theory.

Hirschman's Theory of the Polarization and Trickle-Down Effects

As Myrdal did, Hirschman begins by postulating that development usually starts in one region rather than evenly and at the same time throughout an entire nation. This, in a sense, is a necessary concomitant of development, but once this unbalanced growth has started powerful forces tend to further reinforce it. To use Hirschman's words:

. . . we may take it for granted that economic progress does not appear everywhere at the same time and that once it has appeared powerful forces make for a spatial concentration of economic growth around the initial starting points,²

and

Whatever the reason, there can be little doubt that an economy, to lift itself to higher income levels, must and will first develop within itself one or several regional centers of economic strength. This need for the emergence of "growing points" or "growth poles" in the course of the development process means that international and interregional inequality of growth is an inevitable concomitant and condition of growth

¹Ibid., pp. 34-49.

²Albert O. Hirschman, The Strategy of Economic Development (New Haven: Yale University Press, 1958), p. 183.

itself. Thus, in the geographical sense, growth is necessarily unbalanced.¹

Once one region has achieved a development advantage over the rest of the nation, certain forces will immediately begin to operate which are detrimental to the development of the other region of the same country:

Several unfavorable or polarization effects are . . . likely to be at work. Comparatively inefficient, yet income-creating Southern activities in manufacturing and export may become depressed as a result of Northern competition. To the extent that the North industrializes along lines in which there is no Southern production, the South is also likely to make a bad bargain since it will now have to buy Northern manufactures, produced behind newly erected tariff walls, instead of similar goods previously imported from abroad at lower prices.²

A more harmful polarization effect is the emigration of skilled workers from the poor to the richer regions:

A most serious, and frequently observed, polarization effect consists in the kind of internal migration that may follow upon the economic advances of the North. . . . Northern progress may denude the South of its key technicians and managers as well as the more enterprising young men. . . . It becomes almost a certainty that the South will lose to the North first and foremost its more highly qualified people. And, along with skill and enterprise, what little capital the South generates is also likely to migrate Northward.³

Opposing these Polarization Effects, there might be some beneficial effects on the poorer regions emanating from the more dynamic one:

¹Ibid., pp. 183-184.

²Ibid., p. 188.

³Ibid., pp. 188-189.

The favorable effects consist of the trickling-down of Northern progress: by far the most important of these effects is the increase of Northern purchases and investments in the South. . . . In addition, the North may absorb some of the disguised unemployed of the South and thereby raise the marginal productivity of labor and per capita consumption levels in the South.¹

In evaluating the net effect of these two opposing forces, Hirschman concludes that:

. . . we would . . . feel confident that in the end the trickling-down effects would gain the upper hand over the polarization effects if the North had to rely to an important degree on Southern products for its own expansion. For instance, if the North specializes in manufactures and the South in primary production, the expanding demand of the North ought to stimulate Southern growth. But things may go less smoothly. It is likely, in particular, that the short-run supply elasticity is low in the South. . . . In this way checks to the trickling-down effects may well come into play, and as a result the South could be left in a far worse backwater than before.²

In addition, and independently of the possibility of low short-run elasticity of supply in the backward area, the Polarization Effects will normally exceed the Trickling-Down Effects if:

. . . the North possesses within itself a large and productive agricultural area or is able to supply its needs in primary products from abroad and through domestic synthetic production, [then] the South will be largely cut off from beneficial contact with Northern development, while remaining exposed to the adverse polarization effects. Under these conditions--which are or were fairly typical of such backward regions as Brazil's Nordeste, Columbia's Oriente, and Italy's Mezzogiorno--the stage would be set for a prolonged split of the country into a progressive and a depressed area.³

¹Ibid., pp. 187-188.

²Ibid., p. 189. The underlining is mine.

³Ibid.

Such a split could only be corrected by deliberate economic policy (that is, by interferences with the free operation of the market forces).¹

Theoretical Comparison of Myrdal's and Hirschman's Theories

The first thing that strikes the reader of Myrdal's and Hirschman's works is the remarkable similarity of their theories. Myrdal's Backwash and Spread Effects is almost completely identical with Hirschman's Polarization and Trickling-Down Effects. There are, however, some differences as to approach, content, and conclusions between Myrdal's and Hirschman's presentations. These all tend to make Hirschman's exposition a better one (though far from satisfactory, as will be seen in the next section). These differences, being minor, however, can be disposed of rather quickly.

With respect to content, the major and by far the most important difference between Hirschman's and Myrdal's theories is in their treatment of emigration. Myrdal makes no clear-cut distinction between employed and unemployed, skilled and unskilled emigrating workers, or between members of the labor force and others. Most of the times in his exposition he seems to regard the emigration of all workers, whether employed or unemployed, skilled or unskilled, as detrimental to the development of the poor region because

¹Ibid., pp. 190-195.

emigrants embody human capital and because their emigration adversely affects the age structure of the population of the area of emigration. This is serious.

Hirschman is a little more careful. He distinguishes employed from unemployed unskilled workers and regards the emigration of unskilled workers who are unemployed--open or disguised--as beneficial to the poor region since their departure releases their consumption while not affecting the level of output. He also separates skilled from unskilled workers by pointing out that it is the skilled workers who are more likely to emigrate, and that this is necessarily harmful--much more harmful than if unskilled workers had left. Though Hirschman does not elaborate any further, this is definitely better than what Myrdal has to say on the subject.

Finally as to conclusions, Myrdal seems to be more pessimistic than Hirschman as to the ability of the unhampered operation of the market mechanism to function to eventually reduce regional inequalities. But here the difference is slight and results almost entirely because Hirschman is a little more careful than Myrdal in qualifying his sweeping generalizations. According to Hirschman the only case where the size of the Trickle-Down Effects can be expected to exceed the Polarization Effects occurs when: (1) the supply elasticity in the poor region is not low, or if low it could be fairly easily increased, (2) when the North

does not possess enough fertile land so that it cannot raise itself the food and raw materials it needs, (3) when the North cannot import needed agricultural products and raw materials from abroad because of balance of payments difficulties. The above conditions do not generally prevail. Thus we know that the supply elasticity of poor regions is generally low and in most cases it has been impossible to increase it substantially; that the richer region should possess less fertile land than the poorer region is often not the case (for example Northern Italy has more and better land than the South and so does the richer region of Brazil in relation to its poorer region, etc.); Hirschman has a better case where because of balance of payments difficulties the richer region cannot import the raw material and food it needs and thus it is forced to stimulate the expansion of their output in the underdeveloped region, but even this difficulty may not stimulate the agricultural development of the poor region substantially--the richer region is likely to have at its disposal the larger part of a country's foreign exchange whether arising from its own exports or the exports of the poorer region (e.g. Pakistan, Brazil) to import needed raw materials and other agricultural necessities.

Thus, we may conclude that Hirschman is almost as pessimistic as Myrdal; for both believe that under the normal conditions prevailing in a nation which is partly developed and partly underdeveloped, the Backwash or Polarization

Effects are likely to exceed the Spread or Trickle-Down Effects.

Theoretical Evaluation and Extension of
Myrdal's and Hirschman's Theory

Theoretical Evaluation

Myrdal's and Hirschman's Theory has many shortcomings.

First of all, in talking about Backwash and Spread Effects, the authors are concerned almost exclusively with the net outflow of resources (people, capital, etc.) out of the poor region and to the richer one. In stating that this net outflow of resources is detrimental to the poorer region, they talk almost as if they wanted to maximize the availability of resources in the poorer region. But what needs to be maximized is not the availability of resources but the development of the poor region, and resource availability is a necessary but certainly not a sufficient condition for development. For development to actually take place, not only resources must be available but they must be actually used for that purpose.¹ We could regard this outflow of resources as being harmful to the poor region only if these same resources could and would be effectively used within the disadvantaged region. Thus to show that a harmful effect is taking place we must show that the real per capita

¹Hirschman is not entirely unaware of this. See his: The Strategy . . ., pp. 46 and 188. Thus Myrdal is more guilty than Hirschman in this respect.

income (present or potential) and the structure of the economy of the poor region has been or would be adversely affected by this resource outflow. This involves looking not only at the availability of resources in the underdeveloped region but also at their profitability. Hirschman did not recognize this. According to him the outflow of skilled workers and capital is, per se, harmful to the South, and, as we have already seen, Myrdal is even more guilty than Hirschman in this respect. To talk about the availability of resources is only a first step; the next one is to show that they could and would be used and that their use would cause (or would have caused) an increase in the per capita income in the poor region concurrently with those other changes (structure of the economy, social conditions, beliefs, etc.) which are the normal accompaniment of what we call development. Later, I will attempt to carry this dissertation in the direction indicated above. That is, I will first attempt to show what happens to the availability (actual or potential) of developmental resources in the backward region as a result of the free and unhampered operation of the market mechanism; I will then attempt to show what use these resources could have been put to in the poor region (their profitability) in order to determine if this outflow of resources has been harmful to the poor region and finally what effect the use of these resources would have had in the poor region as far as its average real per capita income and the structure of its economy.

The second basic criticism that can be levied against the theory of Backwash and Spread Effects is that, according to it, free and unhampered operation of the market mechanism not only allows regional inequalities to widen but it is in fact the direct cause and the specific vehicle through which widening regional inequalities take place. Myrdal attributes to traditional economic theory the prediction that its operation would tend to reduce regional inequalities. In the face of widening regional (and international) inequalities, the theory is accused of being blind to facts. It is the "Blind Spot" of traditional economic theory.¹ This of course is wrong. In no place does traditional economic theory predict or imply that its operation would tend to reduce regional (and international) inequalities. All this theory says is that if factors of production are perfectly mobile, both regionally (and internationally), the economic return to homogeneous factors will be the same in all regions (and in all nations). For example, suppose we had two regions that were completely isolated (no interregional factor mobility or trade), that we had only two homogeneous factors (L and K) and that one region had a much higher $\frac{L}{K}$ ratio than the other; then the first region would have a lower marginal productivity of labor and therefore lower wages, and a higher marginal productivity of K and therefore higher returns on capital than

¹Myrdal, Rich Lands . . . , pp. 144-149.

in the second region. If we now allowed for perfect mobility of factors, labor would flow out, and capital would flow in region one. As a result of these resource flows, the supply of L would fall (shift up) and the demand (or productivity of L) would increase (shift up) in region one. These would cause the return to labor to rise and the return to capital to fall in region one. In region two the exact opposite would take place. This would continue until the return to the homogeneous factor labor and capital would be exactly the same in region one and region two. Hence this theory says nothing explicitly, and nothing can be inferred as to what would happen to regional inequalities in real per capita income.¹ Even when, as a result of perfect factor mobility, the return to homogeneous factors is exactly the same in the two regions, real per capita income may be widely different because one region may end up with a greater labor force participation on the part of its population and a greater proportion of skilled workers than the other region. Any one of these reasons may result in higher real income per capita in one region than in the other. In the process of equalizing factor return to homogeneous factors between the two regions, the net effect of the other factors considered may tend to widen, reduce or leave

¹I am not the first one to recognize this. A brief but lucid exposition of this point is also to be found in an article by Professors Okun and Richardson: B. Okun and R. W. Richardson, "Regional Income Inequality and Internal Population Migration," Economic Development and Cultural Change, IX (1961), 130-32.

unchanged the difference in real per capita income that originally existed between the two regions. Nothing can be inferred from traditional economic theory with respect to this.

There is, in addition, a much more subtle, but nevertheless theoretically very important point, to be made which is related to what was first said, but which I have never before met in the literature. Let us suppose that we actually observed regional inequalities to have increased within a particular country over a given period of time. Of course, the poorer region need not have become poorer in an absolute sense. All that needs to have taken place is that the poorer region grew more slowly than the richer one. However, and this is crucial, the unhampered operation of the market mechanism may or may not have been the direct cause or the explicit vehicle for the widened regional inequality. The widened inequality may have resulted entirely from factors purely internal to each region. For example, social conditions in the more advanced region (the greater receptivity to new ideas and to better techniques, the greater desire to improve oneself, the greater availability of entrepreneurs, etc.)--these may have been the exclusive cause of the faster growth rate, and of the widening inequality in real per capita income between the more dynamic and the more backward regions. Under the circumstances, we can only blame the free and unhampered operation of the

market mechanism for allowing this to take place or for not being more effective in stimulating the development of the poorer region. This is certainly a much weaker case against the market mechanism than if the market mechanism itself was the cause and vehicle through which regional inequality widened. In order to prove this stronger case, it would have to be shown that the market mechanism, by its operation caused an outflow of developmental resources out of the poor region and to the richer one--resources which could and would have been used within the backward region, and further that by their use, the real per capita income and the structure of the economy of the poor region would have been beneficially affected. It is this stronger case against the market mechanism which Myrdal, Hirschman, Prebisch, Singer, and all other writers who attack traditional economic theory, are making. They all argue for the market mechanism not only allowing but actually causing regional (and international) inequalities.

As can be gathered from what has already been said, no amount of theoretical speculation can give us a generalized answer to these questions. That is, theoretical speculation alone could not tell us whether the free operation of the market mechanism allows or causes regional inequalities to increase or decrease. This depends on the underlying conditions prevailing in each particular nation affected by dualism. Since these conditions differ, the conclusion

reached may differ from case to case. In short, what we need are empirical studies. Of these there are almost none (for reasons that will be examined in a moment). I intend to start filling this empirical vacuum by studying in depth the way in which the free operation of the market mechanism operated from 1951 to the present in the dual economy which is Italy.

The third criticism is more concrete but also very important. In presenting their theory, Myrdal and Hirschman did not give any indication whatsoever as to the steps or techniques to follow in order to apply the theory to concrete cases. And a theory which has no empirically measurable content is not a very useful theory. Conclusive evidence that this is in fact the case can be gathered by turning to the area of application of this theory. There have been only one or two attempted applications of this theory since it was expounded almost fifteen years ago.¹

¹In a fairly recent article (suggested to me by Professor Okun), Jeffrey Williamson, reviewing empirically the experience of some 24 countries, came to the conclusion that regional inequalities tend to increase during the early stages of development, while decreasing later. This, as we have seen, is only a small fragment of the broader hypothesis which Myrdal and Hirschman advanced and with which I am primarily concerned. In any event, if Williamson's conclusion is correct, then Italy must be considered an exception to the rule (North-South inequalities in real, per capita income have increased, not decreased, during the past hundred years--See Chapters I and VII of this dissertation), unless we are prepared to say that Italy as a whole is still in its "early stages of development" as Williamson implicitly does by treating Italy together with Brazil (Italy: per capita income, in current dollars, in 1969 was \$1200 and 25% of the labor force was in agriculture. For Brazil the respective figures are \$500 and over

This has been so not because the problem to which the theory refers is not an important problem whether we viewed it regionally or internationally (in fact a great deal of controversy has been and is raging today, particularly between developed and underdeveloped countries, with regard to this precise aspect of traditional economic theory)--rather, the reason for this I believe is to be found exclusively in the fact that the authors of the theory did not give any indication as to how to apply it and because of the widespread lack of regional data.

At this point, let us consider, very briefly, the most recent application of the theory of the Backwash and Spread Effects in order to get an insight into the problems facing the researcher in attempting to put this theory to use. This appears in an article by Werner Baer of the Economic Growth Center of Yale University, who attempted to apply Myrdal's and Hirschman's theory to the case of Brazil.¹ But he attempted to put his theory to use in the way in which it was presented by its originators, thus implicitly failing to recognize all the very serious criticisms that can be raised against it. Thus with regard to internal population migration all he has to say is: "Not

50%). See: Jeffrey Williamson, "Regional Inequality and the Process of National Development," Economic Development and Cultural Change, XIII, No. 4, Part II (July, 1965), 1-84.

¹Werner Baer, "Regional Inequality and Economic Growth in Brazil," Economic Development and Cultural Change, XII (1964), 268-85.

enough data is available to judge whether the migrants [out of the Northeast and to the richer region] are the more skilled and talented ones of the Northeast, who would thus constitute a net drain on the region."¹ Though Baer has no data on population migration, if he had it he would (judging from the above quotation) regard the emigration of skilled workers out of the Northeast as necessarily harmful to this region (without considering, however, if these emigrating skilled workers could and would have been productively employed in the poor region if they had not emigrated).² Subsequently, Baer very ingeniously puts to use the data available to him to establish the outflow of capital from the Northeast. Once he has determined the size of this outflow, as we would expect from what he said on emigration, he regarded this outflow as detrimental to the poor region without considering whether this capital would or would not be put to productive use in the Northeast, in the absence of government intervention.³ Obviously, from the way Baer treats the interregional flow of people and capital we can conclude that he too (as Myrdal and Hirschman) would measure Backwash and Spread Effects by changes in

¹Ibid., 276. The words enclosed by the brackets are mine.

²Of course, it must not be assumed that simply because some resources cannot be used at present that they may not be needed and used in the near future.

³Baer, "Regional Inequality . . . ," 277-79.

resource availability in the poor region rather than by the effect that these resources flows would have on the average regional real per capita income and on the structure of the economy of the poor region. Continuing, Baer compares the structure of the economy of the Northeast in 1947 and in 1958, and noticing that this structure had hardly changed and that per capita income had increased but very little, while the richer region had become much more industrial and had had a fairly high increase in its per capita income during the same period, Baer concludes that the widening regional inequality was caused by the way the market mechanism operated in Brazil.¹ Thus, the theory of the Backwash and Spread Effects is not improved in the least by this uncritical application, but is left in precisely the same poor state in which its authors had left it.

It is against this background that I hope my work will be judged. The scarcity of empirical applications of this theory is to be contrasted with the incredible number of times that this theory is used "en passant" to explain widening regional and international inequalities. It is considered as being self evident that if regional inequality in certain not very developed nations has increased over time this must have been (at least in part) caused by the fact that the operation of the market mechanism drains the poor region of its developmental resources.

¹Ibid., 284.

In order for the theory of the Backward and Spread Effects to be applicable to the real world a great deal of corrections and elaborations must be made on it. The corrections that are needed are implicit in the criticisms made in what has been said above. The elaborations involve the breaking up of the aggregate movements (of people, capital, and commodities) discussed by Myrdal and Hirschman into its component parts; in precisely indicating how to actually measure these various submovements, and finally in specifying what data is needed to accomplish this. In doing all this, and in putting the emphasis on structural changes, I will be pushing into new theoretical territory.

This elaboration, consistent with the criticism expounded above, will be presented in the next section. In subsequent chapters the various submovement will be subjected to empirical measurement.

Theoretical Extention

Definitions

I would define a Backwash Effect as anything, traceable to the richer and more dynamic region, which by its operation reduces (or prevents as fast an increase as would otherwise be possible in) the average real per capita income of the poorer region and which also adversely affects the structure of its economy. For example the emigration out of the less developed region and to the more developed

one of a previously employed industrial skilled worker of whom there is an actual shortage in the poorer region and who before emigrating had a higher than average real income--this would be regarded as a Backwash Effect because his departure will leave the poorer region with a lower average real per capita income and with an adversely affected economic structure.

On the other hand, I would define a Spread Effect as anything, traceable to the more developed region, which by its operation increases (or prevents a fall that would otherwise take place in) the average real per capita income of the poorer region and which would also beneficially affect the structure of its economy. For example, the emigration out of the poorer region and to the richer one, of an employed but surplus ($M. P. = 0$) agricultural laborer would be considered as a Spread Effect because as a result of his departure, the average real per capita income of the people remaining in the poorer region would increase and the structure of its economy would be improved (the proportion of the total labor force in agriculture would fall, while the proportion of the labor force "effectively" employed--a $M. P.$ larger than zero--would increase). The size of this Spread Effect will be given by the actual increase in the average real per capita income in the poorer region.

To be noted is that for a Backwash or Spread Effect to take place, total output need not change if there is an interregional flow of people. It is the change in the relation between total output and total population over a period of time which (together with changes in the structure of the economy of the poor region) give rise to Backwash and Spread Effects. A very important consideration pertaining to all the Backwash and Spread Effects and which greatly complicates their measurement must now be introduced. The various Backwash and Spread Effects almost invariably operate over long periods of times, and not simply for the year during which the original flow which gives rise to them takes place. For example, the emigration of a surplus farm laborer, during a given year, releases his consumption not only for the year in which he emigrates but over his remaining life span. Since I am defining Backwash and Spread Effects on a per capita basis, the value of the released consumption over the period considered must be divided by the number of people remaining in the backward region in order to get the size of this Spread Effect.¹ The same principle will be applied to all other Backwash and Spread

¹It must be noted that, although a Spread Effect is here being defined and explicitly measured on the basis of a change in the real per capita output, this measure also implicitly incorporates a beneficial structural change in the economy of the poor region (as explained in the second half of the previous page). Thus a Spread Effect is not excessively narrowed to include only changes in the real per capita output; beneficial structural changes must also accompany it. Of course, the opposite holds for a Backwash Effect.

Effects which operate for periods of time longer than for the year in which the particular flow which causes them, takes place.

Theoretical Treatment of the Various
Backwash and Spread Effects

I will now proceed to break up the aggregate movements (movement of people, capital, and goods, mentioned by Myrdal and Hirschman) into their component parts or sub-movements and discuss each of these submovements theoretically, indicating also how I intend to actually measure them.

The presentation that follows is organized along the following lines:

- (1) Movement of people
- (2) Movement of capital
 - (a) outflow of savings from the underdeveloped region.
 - (b) inflow to the underdeveloped region of private capital from the developed one.
 - (c) remittances to the poor region from its emigrated labor.
 - (d) abandonment of fields and houses in the poor region.
- (3) Movement of goods
 - (a) movement of agricultural products and raw materials.
 - (b) movement of manufactured goods.

I will discuss each of these theoretically.

(1) Movement of People

The emigration (out of the underdeveloped region and to the developed one) of dependents, unemployed workers (whether unskilled or skilled and when there are no short-run prospects of fruitfully employing them in the poor region over the period considered--here, 1951-1968), or surplus farm labor (M. P. = 0)--this emigration will not reduce the total output of the South. Since that total output will now be subdivided among the fewer people remaining in the South, this will leave a higher average product or real income per capita in the poor region and will thus be regarded as a Spread Effect. However, even if we were dealing with employed, unskilled or skilled workers, as long as the number of unemployed workers with comparable skills still remaining in the backward region greatly exceed the number of those who emigrate, and as long as they are widely distributed over that region or are willing to move to those areas of the poor region where job opportunities open up--as long as all of these conditions are met, then unemployed workers with similar skills can replace the employed workers who emigrate and the total output of the poor region would not or should not fall.¹ Again, since the unchanged output is now subdivided among the fewer people remaining in the

¹When the entire pool of the unemployed (over and above that of the frictionally unemployed) is exhausted, the further emigration of previously employed workers will begin to have real effects. This will be considered in the discussion of the Backwash Effects.

poor region, it will leave the average real per capita income of this area higher than before and this will also be regarded as a Spread Effect. The size of this Spread Effect will be measured as follows: we could find the value of the consumption (private and public) that all these emigrants would have used up over the period considered, if they had remained in the poor region; from this figure we could deduct the frictional loss of production, if any, when an employed worker emigrates--before a replacement is hired--and also the cost of transportation involved in emigration, if incurred by the economy of the poor region; we would then divide the resulting figure by the number of people remaining in the backward area. What we have now found represents the value of the increase in the availability of output or real income per person (remaining in the poor region) that would result from any of the above forms of emigration, and would be taken as the size of this Spread Effect. To be noted is that the structure of the economy of the poor region has also improved: the ratio of effectively employed workers to total population has increased.

On the other hand, the emigration of skilled workers and professional people, who were either employed at the time of their emigration (or for whom profitable employment could soon have been found), and who were earning (or could soon have been expected to have earned) an income higher than the average income in the underdeveloped region--this

emigration would be harmful to the poor region (and thus be regarded as a Backwash Effect) because it would cause a fall (or prevent as high a rise as otherwise possible) in the average real per capita income of the people remaining in the backward region and would also adversely affect the overall skill composition of its economy.¹ The size of this Backwash Effect could be measured by the fall (or lack of rise) in the region's average real per capita income. That is, the value of the expected future income stream (over and above the regional average and over the period considered) that these emigrating workers would have received if they had not emigrated, divided by the total number of people (including these emigrants) in the poor region, gives us the value by which the average real per capita income would have increased in the poor region. It must be pointed out that the dependents who emigrate together with these workers, have already been considered when the Spread Effects of emigration was discussed.

¹I am here implicitly assuming that the higher than average income of skilled workers and professional people is the reflection of their higher real productivity. This would not be so in the case of emigrating lawyers, if their higher than average incomes before emigration were based on promoting litigations among local peasants as to land boundaries, etc., and which would thus not represent real productivity as far as the economy of the poor region is concerned. In fact, their emigration would be beneficial to the peasants involved in such litigations and to the entire economy of the region. The same might be said of some so-called "managers" in backward regions, in the case where their higher than average income is not a reflection of higher real productivity in the performance of truly managerial functions, but simply because they are the "trusted person" or watchdog for an absentee-landlord. The importance of these and similar cases might be quantitatively small, but it is important to recognize them in principle.

(2) Movement of Capital

(a) Outflow of Savings from the Underdeveloped Region

Whatever portion of the private savings flowed, or might have flowed, out of the South to be invested in the North, could not be regarded as a Backwash Effect on the South if it can be shown, by consideration of interest rates and the existence of excess bank reserves in the South, that these savings could not and would not have been used in the South during this period. Of course, if the data showed that there was instead a North-South flow of bank savings during this period, this would be regarded as a Spread Effect on the South.

The size of this Backwash Effect could be found by getting the value of the expected income stream (over the period considered) resulting from the use of these savings within the poor region and by dividing it by the number of people living there. This would represent the value of the foregone rise in the average real per capita income of the poor region as the result of the outflow of some of its savings. The excess, if any, in the return of those savings when invested in the more developed region over what they could be expected to have yielded in the less developed one, divided by the number of people living in the poor region, would have to be subtracted from the above Backwash Effect. The question of whether the present interregional capital flows do or could serve as the basis for regional

specialization, though directly related to what has been said above--will be postponed--for the sake of orderly presentation--till after all of the submovements have been considered.

(b) Inflow to the Underdeveloped Region of Private Capital from the Developed One

This inflow of private capital to the poor region is not necessarily precluded by the existence of an opposite flow and might result from the desire, on the part of some entrepreneurs of the dynamic region, to develop in the poor region some source of raw material (petroleum, minerals, etc.) the profitability of which either is not seen by the residents of the poor region, or because they are not willing to shoulder the risks involved, or because they do not have the know-how to do so.

Since this capital inflow into the poor region is undertaken for directly productive purposes, it is almost certain that it will increase the total output of the region. To the extent that this capital is used to employ idle skilled workers, idle unskilled workers (who would not emigrate), or to increase capital (and therefore, productivity) per worker, it would increase the average real per capita income in the poor region and would hence be considered as a Spread Effect. The actual size of this Spread Effect would be equal to the value of the expected stream of income (over the period considered) in the poor region resulting

from this capital inflow divided by the number of people of the region.

(c) Remittances to the Poor Region from its
Emigrated Labor

The remittances to the poor region from its permanent and temporary emigrants to the more developed region, plus the savings which returning temporary emigrants bring back with them to the poor region augment the average real per capita income of the poor region; for this reason it has to be taken as a Spread Effect. The size of this Spread Effect could be measured by the value of the inflow of these remittances divided by the number of people of the poor region. If the marginal propensity to save out of these remittances were found to be greater than on the income generated in the poor region and if this extra savings were actually used for productive purposes in the poor region, then the average, per capita income of the poor region may increase even more than by the value of these remittances and thus lead to even greater Spread Effects. This would be measured in the same way as was done in the case of an inflow of funds from the rich to the poor region, except that now the return to this investment accrues to the underdeveloped region and not to the developed one. It is more likely, however, that this extra saving would also flow to the richer region, if this was already the fate of some of the savings that arose independently of these remittances.

(d) Abandonment of Houses and Fields

It is sometimes said that widespread abandonment of houses and fields is often observed in areas of mass emigration and thus may give rise to Backwash Effects. Keener observers disagree. This topic will be included here (without, however, making a great deal of it) simply for the sake of completeness.

Totally abandoned Houses: to the extent that abandoned houses were uneconomically located (that is, in mountainous, inaccessible areas of the backward region where the possibility of agricultural and/or industrial development would be out of the question), this would not be regarded as a Backwash Effect. On the other hand, if the abandoned houses were as favorably located for industrial and/or agricultural development as some other area of the poor region, but that since their abandonment had not been foreseen the industrial and/or agricultural investments went to other areas of the retarded region where new residential buildings had to be constructed to house the new workers attracted to the area--under these circumstances, the abandonment of houses should be regarded as a Backwash Effect.¹ The size of this Backwash Effect could be measured by estimating the return that would have resulted in the poor region, if the money spent to provide additional housing had instead been spent on some directly productive

¹Unless, of course, abandonment was due to intra-regional or international population movements.

investment--if such further investment opportunities existed in the poor region and would have been taken advantage of. The resulting figure would then have to be divided by the number of people in the region.

Totally abandoned fields: mass emigration from the poor region might also cause the total abandonment of some of its previously cultivated land. Whether or not this should be included as a Backwash Effect depends on whether or not this is marginal or fertile land. If it was marginal land (to be abandoned) which could only have been made sufficiently productive (if at all possible) by the application of large quantities of capital--capital which could have been employed more productively elsewhere in the poor region (e.g. industrial investments)--then, this should not be included as a Backwash Effect. Thus if the data showed that there was indeed some land that was totally abandoned, but that this occurred in mountainous areas where the agricultural incomes of the people still remaining there was less than the regional average per capita income, then this could be taken as a clear indication that it was marginal land to be abandoned; hence, it should not be considered as a Backwash Effect. Or, if the data showed that a great deal of agricultural unemployment (open or disguised) remained in most other areas of the poor region over the period considered, then there could not possibly have been fertile land remaining abandoned because unemployed

agricultural workers would immediately have taken over this fertile land as soon as it was vacated. This could be confirmed by examining the change in the selling price of the various types of land in the poor region, over the period considered. On the other hand, if it was fertile land to be abandoned, then the value of the expected future (for the period considered) net output of this land, divided by the number of people living in the poor region, should be taken as the size of this Backwash Effect. As to the location of this fertile land--it could only be located in plains or hills (but certainly not on mountain tops) and near sources of water for irrigation. The only way fertile land could remain abandoned in the face of agricultural unemployment in other areas of the poor region is in the case where the possibility of finding industrial employment and living in urban centers of the more dynamic region had so changed the economic horizons of the people living in the poor region, as to make them unwilling to move to other areas of the poor region where fertile land was being abandoned, but to continue in their present pursuits, or even remaining unemployed, while awaiting the possibility to emigrate. It is in this latter case of very high interregional but very low intraregional labor mobility that this Backwash Effect arises. (This is on the assumption that the difference between interregional and intraregional labor mobility in the poor region is the result of its association with the more dynamic one.)

Two more additional comments must be made with respect to abandoned houses and fields when they do in fact represent Backwash Effects in the poor region. First of all, in these cases the deleterious effects on the poor region are not marked by corresponding gains to the dynamic region (as for example, in the case where the savings generated in the poor region are invested in the more advanced region). In fact, since the abandonment of houses results from mass emigration from the retarded to the developed region, the need for capital expenditures in the latter is increased as more housing etc., must be provided to accommodate these immigrants, lest there is a reduction in the average, social, capital per person there. Secondly, considered above were only two possible cases: where the economic value of the abandoned resources, from a social point of view, was either zero or where it was equal to their private market value. It is conceivable, indeed likely, in view of the structural disequilibrium likely to exist in the backward region at the factor and at the final goods level, that the social value of the abandoned resources would be different from the two cases considered. What we would then need is a proper accounting or shadow price (one that reflects the social opportunity cost) of these resources, before we could actually measure this Backwash Effect.

(3) Movement of Goods

The interregional flow of goods between an underdeveloped and a developed region usually takes the form of an outflow of agricultural commodities and raw materials from, and an inflow of manufactured goods to the backward region. I will now discuss each of these flows theoretically.

(a) Agricultural Commodities and Raw Materials

Growth transmission could take place through trade if a dynamic and fast growing region is not self-sufficient in food and raw materials, leading to a condition whereby part of its growing income would outflow and be spent outside the region (to import the needed food and raw materials). To the extent then that expansion in the developed region actually stimulates the production of food and raw materials in the underdeveloped region (which would not otherwise have taken place) we could regard this increase in production as a Spread Effect since in the process of expanding the output of agricultural products and raw materials in the poor and agricultural region, the regional average real per capita income would be increased (if for no other reason because some otherwise idle labor of the backward region would be absorbed). The value of the expected net increase in the production of food and raw material over the period considered in the poor region (due to expansion in the richer region), divided by the number of

people living in the poor region, could be taken as an indication of the size of this Spread Effect.

(b) Manufactured Goods

Under normal conditions, the developed region is a net exporter of manufactured goods to the underdeveloped one. (The poor region usually pays for these by exporting some agricultural products and raw materials to the developed region, by the remittances from its emigrated labor, and by that part of the government aid program to the poor region financed by taxes raised in the rich region.) This inflow of manufactured goods from the developed region, not only might discourage the setting up of new manufacturing firms in the poor region (a dynamic and very evasive concept to measure) but may also drive out of business existing firms in the poor region. Here I will concentrate on this latter effect; the former will be discussed when I will consider the more dynamic aspects of the theory of the Backwash and Spread Effects.

If it can be shown that as a result of the competition of the more efficient manufacturing firms of the developed region, some firms in the underdeveloped region were driven out of business and that the workers, who as a result lost their job, did not emigrate but swelled the ranks of the unemployed--if it can be shown that, then this would represent a Backwash Effect in the sense that real/capita income in the poor region would fall on the average

(total output would fall, but the total number of people in the backward region would not be correspondingly reduced). A measure of the size of this Backwash Effect could be obtained by estimating the value of the output of these firms over the period considered if they had not gone out of business, minus the value of inputs imported from outside. The resulting figure represents the value added in the poor region by these firms. By dividing this by the number of people of the poor region we get the size of the Backwash Effect involved.

If, on the other hand, as firms in the poor region go out of business, its workers emigrate soon after (rather than remain unemployed in the poor region indefinitely), then we could only include this failure as a Backwash Effect (measured as indicated above) if these workers when employed (before these firms in the poor region went out of business) earned an income higher than the average per capita income in the underdeveloped region. Failure of these firms and departure of their workers would leave the average real per capita income in the poor region lower than before. This is quite possible even if the failing firms are inefficient in relation to competing firms in the developed region, since the poor region usually includes a large agricultural sector which might be even more inefficient.

Measurement difficulties may be enhanced by the failure of manufacturing firms in the poor region which are owned by businessmen of the developed region. This makes for accounting difficulties which may or may not have economic significance. The procedure to be followed in these circumstances is to disregard the question of ownership at the beginning and establish what the flows are, then add back the problem of ownership and see what difference it makes (from the point of view of the development of the poor region) if the owners of the failing manufacturing firms are businessmen of the underdeveloped or developed region. But regardless of whether or not the failure of manufacturing firms in the underdeveloped region is regarded as a Backwash Effect or owned by businessmen of the poor region, the failure of these manufacturing firms will almost certainly adversely affect those other sectors of the economy of the poor region (such as food and raw material production and services) which catered to these manufacturing firms (before they went out of business) and their workers. This and similar affects will be discussed later when the interrelations between the various Backwash and Spread Effects will be considered.

It is obvious from what was said above that the Backwash Effects that may arise from the interregional movement of manufactured goods is perhaps the most difficult and slippery concept of the entire dissertation from both a theoretical and computational point of view.

Another harmful effect on the poor region might also result from the national tariff policy on the importation goods from other nations. There usually are certain manufactured goods (consumer and capital goods) which the underdeveloped region (because of its small industrial base) never actually produced. These it imports from outside. If these capital and consumer goods (which could not be produced in the poor region efficiently or at all) are imported from the developed region at a price higher than they could be purchased elsewhere (because of the national tariffs to protect these national industries located in the developed region), then the excess cost of these imports (from the developed region rather than from abroad) could be regarded as a Backwash Effect since it represents a loss of potential purchasing power and real income in the poor region. The actual measure of this Backwash Effect could be obtained by finding the difference between what the poor region pays to import consumer and capital goods from the developed region and what it would pay for similar goods if it bought them instead in the cheapest foreign market. (An upper limit to the value of this could be obtained by looking at the nominal tariff rates on manufactured goods that the poor region imports from the developed one rather than from abroad, times the actual or estimated value of those imports during the year. The resulting figure would have to be divided by the number of people living in the poor region to get an estimate of the size of this Backwash Effect.

Net Effect, Interactions, More Dynamic Aspects
and Regional Specialization

Net Effect

Having reduced all the Backwash and Spread Effects in terms of their effects on the average real per capita income in the backward region and having indicated exactly how to actually measure them, the "extended theory" is now ready for application to concrete cases. When that is done, we would then be in a position to find the net affect of all these Backwash and Spread Effects for the particular case considered. Not only we would be able to decide if the net result of the operation of all the various Backwash and Spread Effects has been beneficial or harmful as far as the development of the backward region is concerned, but we would also be able to decide on the quantitative importance of this net effect.

Thus we could find if the free and unhampered operation of the market mechanism operated in a way which was harmful or beneficial for the underdeveloped region and by how much the average real per capita income of the poor region and the structure of its economy was affected one way or the other. When I will have answered this question for the Italian case, this will be, to my knowledge, the first time that this important question will have been answered by actual and fairly accurate empirical measurement rather, than being answered as in the past, by "impressionistic evidence." The theory of the Backwash Effect and

Spread Effect, as left by its co-authors, or in the state in which it was found by this author, could never have made this possible.

Interactions

The conclusion as to the net effect of the unhampered operation of the market mechanism on a particular underdeveloped region, as discussed in the previous section, may have to be modified by the possible existence of interactions among the various Backwash and Spread Effects. That is, up to now these various Backwash and Spread Effects were assumed to operate independently of one another; they were treated as simply additive and without recognizing the possibility that there might be interactions among them which were not picked up. This possibility is now explicitly recognized in theory. This does not mean that such interactions necessarily exist in a specific real world situation--only that in an actual application they have to be looked for. Here I will simply discuss one such interaction so as to give an example of what is involved, leaving for Chapter VI the search for the possible existence of other such interrelations in the case of the Italian South. The case I have in mind arises when a manufacturing firm in the poor region goes out of business as a result of competition of more efficient firms in the developed region. When this takes place, those people employed in providing the failing firm with raw materials and its workers with food

and services, will probably lose their source of income. This is a harmful effect on the poor region which has not yet been considered. To find the size of this additional Backwash Effect on the poor region a multiplier analysis to the original failure of the manufacturing firm will have to be applied. The size of the multiplier will depend, of course on the proportion of the raw materials, used by the failing firm, and food and services used by its workers, which was provided from within the economy of the poor region rather than imported from outside. If, on the other hand, the suppliers of the failing manufacturing firm and of its workers, upon losing their outlets in the poor region, succeed in exporting their products to the developed region, this Spread Effect in the poor region serves to offset the loss of markets within the poor region. Thus an interaction between the original failure of a manufacturing firm in the poor region and the resulting increase in the agriculture and raw material exports of the poor region is established. What is important is that in the process of establishing such a link or interaction we have come to realize that these increased exports from the poor region are not a net benefit but serve to neutralize, either totally or partially, a Backwash Effect (which resulted from, but which was in addition to the original failure of manufacturing firms in the poor region) and which was not originally picked up.

Another possible interaction might take place between the emigration of workers and the traditional output of the poor region. For example, the conglomeration of emigrants from the poor region in a particular section of the urban centers of the developed region will give rise to stores that cater to their needs and which import from the poor region commodities which the emigrants traditionally consumed or used before emigration (ex. food specialties, religious articles, etc.). This creates an export market for commodities which probably would not have been otherwise exported. The importance of this, however, is not likely to be great.

More dynamic aspects

The conclusion so far reached as to the net effect on an underdeveloped region of the unhampered operation of the market mechanism, may have to be further modified by the possible existence of more dynamic forces which have not yet been considered. One such more dynamic force is the demonstration effect on the people of the poor region resulting from their being part of a nation which is partly developed. The people of the poor region may try to imitate the expenditure pattern of the people in the richer region and in the process their ability and willingness to save may be reduced. In this case the level of private investment in the poor region may suffer. The demonstration effect may also operate, however, in a way which is

beneficial to the poor region. For example, the people of the poor region may start imitating those of the richer region in working more and harder so as to be able to increase their consumption level. More importantly, they may begin to understand and appreciate, rather than look down, on the social values and the civilization of the more developed, dynamic, and modern region. This latter form of the demonstration effect may, in the long-run, prove to be one of the most beneficial factors in lifting the poor region out of its stagnation. Another important dynamic factor that needs to be mentioned refers to the lack of incentive to the setting up of new manufacturing firms in the poor region in the face of the competition of more efficient firms already established in the richer region and the exportation of their products to the poorer region. This can occur not only in the case of K-intensive commodities but in the case of L-intensive commodities as well. Because of the structural disequilibrium likely to exist in the underdeveloped region, even the production of L-intensive commodities in this region might be discouraged. This latter possibility will be further elaborated next, when the problem of regional specialization will be discussed.

Regional Specialization

If the more developed region specialized in the production of K-intensive commodities, while the less developed one in L-intensive commodities, the total output of the

nation will be greater than in the absence of regional specialization, and by trading with one another both regions will end up on a higher consumption indifference curve. To make such a regional specialization in production possible however, part of the savings which are raised and which could profitably be used within the poor region may have to flow and be invested in the developed region. Such an interregional capital flow may allow regional specialization to occur and benefit both regions and could thus be justified from a national and regional point of view. To that extent, the discussion of the outflow of savings from the poor to the richer region presented earlier may have to be qualified. However, though beneficial to the poor region in the short-run, this form of specialization may perpetuate the subordinate status of this region and might be detrimental to the long-run goal of national economic unification. In addition, because of the structural disequilibrium (at the factor level) likely to exist in the poor region, it might be impossible for this region to specialize even in the production in L-intensive commodities. In such a case, there is indeed regional specialization--but this is a specialization of a funny type: the South specializes in being poor and the North in growing richer. The structural disequilibrium likely to exist in the poor region then might prevent even the limited benefit that would result to the poor region from regional specialization

and be an important factor in keeping this area in the backwater of national economic life.

The Central Hypothesis of the Dissertation¹

Myrdal and Hirschman stated that in the course of the unhampered operation of the market mechanism in a nation which is divided into a developed and underdeveloped region, a net Backwash Effect usually results in the poor region. However, whether or not this is indeed true in a particular case depends upon certain structural features of the economy of the poor region (such as the existence or non-existence of surplus labor, surplus capital, etc.), on the interregional flows taking place (such as interregional migration, the interregional flow of investment funds, and interregional trade), and on the magnitude of these interregional flows in relation to the magnitude of the structural features of the economy of the poor region.

The aim of this dissertation is to examine empirically if a net Backwash Effect actually resulted in the Italian South in the post-war period, given the structural features of its economy, given the interregional flows that took place, and given the magnitude of these interregional flows in relation to the features of the economy of the South.

¹The central hypothesis of the dissertation is repeated so as to make the theoretical presentation being expounded here more nearly complete and also for ease of reference.

Applicability of the Theory

Applicability of the "Extended" Theory

The "extended" theory presented in Section B is applicable whenever regional inequalities exist within a nation. Since regional inequalities are likely to exist not only within underdeveloped but also within developed nations, the theory is applicable to both.

However, since regional inequalities are likely to be larger in an underdeveloped rather than in a developed nation, since the Spread Effects are likely to be smaller in relation to the Backwash Effects in a backward nation,¹ and since the government of a poor nation has less resources at its disposal to correct the regional imbalance--this theory has more significance for the less developed nations than for those nations which are already very rich and developed. However, it must be pointed out that in certain specific cases, the interrelations between a developed and an underdeveloped region take exclusively the form of interregional movements of capital and goods with interregional migration practically non-existent because of the great distance separating the richer from the poorer region. Thus in Pakistan, the East and poor region of the nation is separated by a vast subcontinent from the Western and richer region. Because of the great distance involved, the cost of transportation

¹Myrdal, Rich Lands . . ., p. 40; Hirschman, The Strategy . . ., p. 189. However, this is not always or necessarily so--only likely.

is so great in relation to the very low per capita income of the poorer region, as to represent an insurmountable obstacle to interregional migration. As a result, the interrelations between the two parts of the nation take place exclusively by the interregional flow of commodities, but particularly of savings--foreign exchange especially.¹ The same thing occurred between Trinidad and Jamaica in the Federation of the West Indies (before Jamaica withdrew in 1961), where the thousand miles or so that separated them and the low per capita income prevailing within the Federation greatly limited the flow of people between these two islands.²

Limitation of the Theory

Perhaps the greatest limitation of this theory is the tremendous amount of regional data that is required in order to be able to apply the theory to concrete cases. As far as the Italian case is concerned, sufficient data are available to permit an empirical application of the theory. To be sure, the data that has been collected are not perfect or complete; often indirect measurements and estimations will be required. This was quite expected in view of the

¹J. J. Stern, "Growth, Development and Regional Equity in Pakistan," Centers for International Affairs, Harvard University, Cambridge, Mass., Nov. 1968, pp. 1-171. Unpublished--by courtesy of the author.

²Edwin P. Reubens, Migration and Development in the West Indies, III-IV, 1-84.

scantiness of regional data the world over. Indeed, when judgment as to the quantity and quality of the data presented for the Italian South is made against the background of the availability of regional data for other nations--one cannot help but be surprised to find as much regional data as I did.

As far as sufficient availability of regional data for other nations faced with regional inequality, it must be pointed out that it is precisely in the case of underdeveloped nations, where it would be most crucial, important, and interesting to apply this theory, that the data are not likely to be sufficient. Even in these cases, however, conditions may not be as gloomy as they seem, especially with regard to the future. Most underdeveloped nations of the world have development plans, and as the most advanced among them try to improve these development plans and make them more comprehensive, more and better data is likely to be collected. Also those of the underdeveloped countries which face the problem of dualism, in attempting to correct this regional imbalance, are likely to collect regional data sooner than would otherwise be the case. Thus Italy, faced with a sharply divided economy into a richer and poor region, is more likely to collect, and has in fact collected, more and better regional data than many more developed nations not faced with a problem of regional inequality of similar dimension.

Applicability of the Theory to the
International Economy

The same forces that give rise to Backwash and Spreak Effects within a nation also operate among nations. Myrdal and Hirschman recognize this explicitly.¹ Thus between developed, dynamic and rich nations and underdeveloped, stagnant and poor nations, there might be movements of people, capital and goods which may have an overall total effect which is detrimental to the development of the latter nations--at least so claim the poor nations of the world and some economists (foremost among them Myrdal, Prebish, Singer, W. A. Lewis, and few others) who champion the cause of the poor at the court of the rich. According to them, the few skilled and professional people that underdeveloped countries possess are attracted by the much higher wages, the greater possibility of research, etc. offered in the more developed nations, while the old, illiterates, unskilled are successfully kept out by the selective and discriminatory immigration laws of the developed countries--particularly if they are colored. Similarly, unless the poor nations take protective measures, the little savings they generate is likely to be sent to the more developed nations where the return on them is higher and more secure. Finally, if left unhampered, the market mechanism is likely to perpetuate the agricultural character of their

¹Myrdal, Rich Lands . . . , pp. 94-95, 191;
Hirschman, The Strategy . . . , pp. 195-201.

economy and discourage the establishment of new manufacturing industries and thus forgo all those dynamic benefits which are normally associated with the growth of industry. Counteracting these Backwash Effects, are few Spread Effects, such as an inflow of funds from developed nations to exploit particular natural resources (petroleum, other mineral and agricultural raw materials) that happen to be found in an underdeveloped country, and the ability to consume (by trading) manufactured goods which would either be more expensive (or even impossible to produce) within the underdeveloped country. However, these gains from specialization in production (and then trading) are thrown out by these economists as entirely static and completely missing the point.

Thus the uncompromising conclusion is reached that the international flow of people, capital and commodities is the cause of, and vehicle through which the international inequality between the rich and the poor nations of the world is widened.

However, as it was said in the interregional case, no such overall and universal conclusion can be reached. These international flows may or may not be the cause of the observed widened international inequality. This may be so always, sometimes, or never. It is, in short, an

hypothesis which has never been tested empirically.¹ No wonder there is such a disagreement raging on this subject today!

A more important question for our purposes is to consider whether the interregional or international growth-transmission mechanism is more powerful.

If we abstract for a moment from interferences with the operation of the market mechanism (something which admittedly is much less likely to be true internationally than interregionally), at least in one important respect a nation is better off than a region. Without interferences with trade, an underdeveloped country can trade with a more developed country even if it is less efficient in the production of every commodity, as long as this greater inefficiency is larger in the production of some than in other commodities. Then according to the theory of comparative advantage, the underdeveloped country will export those commodities in which it has a comparative advantage (its absolute disadvantage is least) and import those other commodities in which it has a comparative disadvantage (its absolute disadvantage is greatest). It is because different nations have different monetary systems that translate

¹Only some inconclusive work has been undertaken on the commodity terms of trade. To be noted is that even if it can be shown that the commodity terms of trade have deteriorated for a particular underdeveloped country, its income terms of trade may have increased, and it is the latter that are more important. There have been in addition some studies on international migration, but in general they have not been too successful in answering the above question.

differences in relative productivities into differences in absolute prices (under the gold standard and by the adjustment of exchange rates, presently) that trade is made possible on the basis of comparative advantage only. Faced with the same monetary system, the region of a nation can only trade with the other on the basis of absolute advantage. This, as we have seen, may prove extremely harmful to the poor region.

Turning to interferences with the market mechanism for the benefit of the poor region or nation, it must be said that the poor nation has in general more control over its destiny than a poor region. However, the importance of this factor can be exaggerated. Thus a great deal is made of the fact that a poor nation, but not a poor region, has the power to apply a tariff on the importation of manufactured goods from abroad and thus is able to protect its infant industries or stimulate the birth of such infants. It is true that a poor region has no such recourse. But if there is a sufficiently strong political will in the nation to help its poor region, then a sufficiently high subsidy could be provided so as to achieve as high a protection as wanted to promote the growth and emergence of new industries in the poor region. The greater the political will within the nation to help its poor region, the greater the subsidy that would be provided--and the greater the costs to the national economy--at least in the short-run.

What is true, however, is that it is likely that the development of an underdeveloped region is voluntarily sacrificed, at least temporarily, for the sake of maximizing the national growth.¹ But eventually a region is in a much better position to receive aid to speed its development from the more developed region than is an underdeveloped country from international organizations or directly from developed countries, in the absence of a world government. What is incredible is that in the case of Italy, more than one hundred years after unification, and after the Northwest has achieved an average per capita income of about 1500 dollars per year, many people in the Northwest are still unwilling and do not recognize the need to develop the South. Fortunately the Central Government in Rome has clearly recognized this need and is imposing its will the best it can, often masking its aid to the South from its constituents in the Northwest (from which most of the transfers to the South arise).

Conclusion

The theory of the Backwash and Spread Effect, which in this chapter has been expounded, criticized, corrected, and extended, will, beginning with the next chapter, be applied to modern Italy. The theory will be applied only to the relation between the South and the North of Italy-- the relation between the South and the rest of the world

¹The argument could also be made that the raw material-producing countries are also being sacrificed for the sake of maximizing the growth of the world as a whole (national specialization).

will not be considered here. I am here interested only in the interregional, and not the international aspects of the theory of the Backwash and Spread Effects.

CHAPTER III

THE MOVEMENT OF PEOPLE

Introduction

In this chapter an empirical measurement will be undertaken of the various Backwash and Spread Effects resulting in the Italian South from the northward migration of part of its population since 1951.

The chapter is organized along the following lines: in the first part data will be presented to establish the flows involved; in the second part I will determine, by economic analysis, what part of this South-North migration represents Backwash or Spread Effects as far as the actual and prospective development of the South was concerned; in the third, the actual measurement of the Backwash and Spread Effects will be undertaken; finally, in part four, some concluding remarks on the net effect on the South of this Northward emigration, will be presented.

The Data

Before the actual presentation of the data, a word is in order with regard to its sources and reliability. There are two sources of official data on internal migration

in Italy. The first source is the Census of Population which classifies each person according to the commune of residence at birth. This permits us to find the total number of persons born in the South but residing in the North at the Census date. The increase in this figure between two census dates could be taken as the size of the South-North emigration during the period. However, this figure excludes those Southern emigrants who died in the North between the two censuses, those who returned to the South, and those who left the North for other nations. In addition, the last two Population Censuses in Italy were taken in 1951 and 1961, respectively, and thus no migration data could be obtained from this source for the years after 1961.

The second source of official data on internal migration in Italy is obtained from the registration which migrants must make upon changing their commune of residence. Thus when a Southern emigrant arrives in the North he must register with the local communal authorities and is simultaneously cancelled from the registry of the Southern commune of emigration. These registrations and cancellations are then transmitted to the Central Statistical Institute (ISTAT) in Rome which then publishes the annual figures. One possible source of error in this data arises when a Southern emigrant fails to register upon transferring his residence to the North. However, few Southern emigrants fail to do so since in addition to be required by law, they

would also be unable to collect unemployment and other social benefits if they did not register. Since 1955, the socio-economic characteristics of these emigrants are also collected. This source of data, being fairly accurate and complete, will be used in preference to the census data mentioned earlier. Data on the number of emigrants from the South to the North and on their socio-economic characteristics will now be presented.

From Table 11, it can be seen that from 1952 to 1968 inclusive, 1.9 million people emigrated from the South to the North. As expected, we find that the net outflow of people from the South is directly related to boom conditions in the North. In 1961, the peak of the boom, 240,000 people emigrated from the South. The outflow of people subsequently declined (as the economic recession set in) and reached its lowest point in 1965, with an emigration of only 53,000 people. Since then, economic conditions in the North have been constantly improving and the net emigration figure has also been increasing.

Of this net outflow of people, about 54% were dependents and 46% were workers.¹ Thus the number of emigrating

¹Only from 1956 to 1966 (inclusive), is the net emigration broken down into dependents and workers. For the years 1952-1955 and 1967-1968, only the total is available. However, since the emigration of workers as a percentage of the total remained remarkably constant (with an average of 46% over the 1956-1966 period), even in the face of greatly fluctuating total figures and conditions of boom and recession, I have assumed that the same percentage (46%) also held, on the average, for the years 1952-1955 and 1967-1968

TABLE 11

NET EMIGRATION FROM SOUTH TO NORTH, 1952-1968

Year	Dependents		Workers		Total	
	Number ('000)	Per Cent	Number ('000)	Per Cent	Number ('000)	Per Cent
1952	(37.9)*		(32.2)		70.1	100.0
1953	(32.9)		(28.0)		60.9	100.0
1954	(35.8)	(54.0)	(30.5)	(46.0)	66.3	100.0
1955	(34.7)		(29.6)		64.3	100.0
1956	33.0	51.1	31.6	48.9	64.6	100.0
1957	42.4	55.2	34.4	44.8	76.8	100.0
1958	47.6	55.9	37.4	44.1	85.1	100.0
1959	52.3	52.5	47.3	47.5	99.6	100.0
1960	72.7	54.9	59.7	45.1	132.4	100.0
1961	131.0	54.4	109.7	45.6	240.7	100.0
1962	122.1	54.1	103.8	45.9	225.9	100.0
1963	115.3	56.4	89.3	43.6	204.6	100.0
1964	68.6	57.2	51.4	42.8	120.0	100.0
1965	28.7	54.7	24.1	45.3	52.8	100.0
1966	38.0	53.4	32.8	46.6	70.8	100.0
1967	(64.6)		(55.1)		119.7	100.0
1968	(79.2)	(54.0)	(67.5)	(46.0)	146.7	100.0
Total	1,036.8	--	864.5	--	1,901.3	--

*The figures in parenthesis have been estimated as explained in the text.

Source: For the years 1951-1955: SVIMEZ, Le Migrazioni Interne nel Periodo 1952-66 (Rome: SVIMEZ, 1968), p. 14.

For the years 1956-1966: ISTAT, Annuario di Statistiche Demografiche, 1956-66 (Rome: ISTAT, 1958-69).

For the years 1967-1968: ISTAT, Popolazione e Movimento Anagrafico dei Comuni, 1967-68 (Rome: ISTAT, 1968-69).

workers was about 51,000 per year, on the average, for the entire 17 year period, and varied from a high of 110,000 in 1961 and a low of 24,000 in 1965. As a percentage of the labor force of the South, this emigration of workers ranged from .5% (in 1965) to 2% (in 1961), with an average for the years 1952-1968 of slightly less than 1%. The yearly figures for 1956-1966 also show that 53% of the total number of emigrants were males, and this figure has remained very much constant, year in and year out. In addition, 65% of the net outflow of people were between the ages of 15 and 34, 20% from 0-14, and only 15% from 35 years and above.¹ Obviously, the emigrants were mostly young couples without any children, yet.

From Table 12 we see that less than 5% of the emigrants came from agriculture. In fact, during the economic recession of 1964-1965 there was a net inflow of returning agricultural workers into the South. Thus the 50% reduction which took place from 1951 to 1968 in the agricultural labor force of the South must have resulted from emigration to foreign nations and from attrition and only to a very small extent from internal migration.²

and thus have broken down the total figure for these years into workers and dependents. These estimates are shown in parenthesis in Table 11.

¹ ISTAT, Annuario di Statistiche Demografiche 1956-1966 (Rome: ISTAT, 1959-1969).

² ISTAT, Occupazione in Italia negli Anni 1951-1967, pp. 17, 47-49.

TABLE 12

NET EMIGRATION OF WORKERS FROM SOUTH TO NORTH, BY SECTOR, 1956-1966

Year	Agriculture		Industry		Other		Total	
	No. ('000)	%	No. ('000)	%	No. ('000)	%	No. ('000)	%
1956	3.6	11.1	15.5	49.1	12.5	39.8	31.6	100.0
1957	3.4	9.9	17.3	50.3	13.7	39.8	34.4	100.0
1958	5.6	15.0	19.1	51.1	12.7	33.9	37.4	100.0
1959	3.9	8.3	22.2	46.9	21.2	44.8	47.3	100.0
1960	4.2	7.0	36.7	61.5	18.8	31.5	59.7	100.0
1961	6.0	5.5	74.2	67.6	29.5	26.9	109.7	100.0
1962	3.7	3.6	72.6	70.0	27.5	26.4	103.8	100.0
1963	1.2	1.3	63.7	72.5	24.4	26.2	89.3	100.0
1964	-1.0	-1.9	33.8	65.7	18.6	36.2	51.4	100.0
1965	-1.7	-7.0	11.5	47.7	14.3	59.3	24.1	100.0
1966	<u>0.0</u>	<u>0.0</u>	<u>18.9</u>	<u>57.6</u>	<u>13.9</u>	<u>42.4</u>	<u>32.8</u>	<u>100.0</u>
Total	28.9	4.7	385.5	62.0	207.1	33.3	621.5	100.0

Source: ISTAT: Annuario di Statistiche Demografiche, 1956-1966, VI-XVI
(Roma: ISTAT, 1958-1969).

Beginning with 1964, data on the education level of Southern emigrants is also collected. Table 13 shows that for the years 1964-1966, 2% of the Southern emigrants had a university degree, 5.5% a college degree, about 12% a junior high school degree, while 80% had only an elementary certificate or not even that.¹ To be noted is that the number of emigrating university and college graduates remained fairly constant in the face of greatly fluctuating total, net emigration figures. Thus in 1965, with the total emigration figure very low, the percentage of emigrants with a university and college education was above the average.

Enough information and indirect data exist to make it possible to further break down the yearly flow of emigrating Southern workers into a skilled-unskilled classification.

The only way to get professional people trained (doctors, lawyers, engineers, etc.) is through university education. On the other hand, skilled workers can arise from formal education (college education in the physical

¹What I have called "college" in Table 13, actually corresponds to the last two years of High School and the first three years of College in the U. S.; it is attended by students ages 14-19, and includes also specialized institutes, which though not granting college degrees as such, prepare full time students (also aged 14-19) for technical jobs; e.g. electronic technicians, paramedical personnel, etc. The Italian university offers as much course work as American universities, but requires much less independent research--their thesis is usually written in 2 or 3 months; thus the Italian university corresponds to the last year of college and somewhere between the U. S. M.A. and Ph.D.; it is attended by students aged 19-24 or 26, depending on the faculty.

TABLE 13

EDUCATION OF SOUTHERN EMIGRANTS: 1964, 1965, 1966

Year	University Degree	College Degree	Junior High School Diploma	Elementary Certificate	No Elementary Certificate	Total Emigrants
(Absolute Values)						
1964	1,566	5,390	11,200	58,438	43,487	120,081
1965	1,654	4,055	8,152	27,259	11,657	52,777
1966	<u>1,618</u>	<u>3,952</u>	<u>9,367</u>	<u>35,992</u>	<u>19,913</u>	<u>70,842</u>
Total	4,838	13,397	28,719	121,689	75,057	243,700
(Percentage Values)						
1964	1.3	4.5	9.3	48.7	36.2	100.0
1965	3.3	7.6	15.4	51.6	22.1	100.0
1966	<u>2.3</u>	<u>5.6</u>	<u>13.2</u>	<u>50.8</u>	<u>28.1</u>	<u>100.0</u>
Average	2.0	5.5	11.7	50.0	30.8	100.0

Source: ISTAT: Annuario di Statistiche Demografiche, 1964-1966, XIV-XVI
(Roma: ISTAT, 1967-1969).

sciences, business administration, etc., and from the other special institutes mentioned earlier), from government programs aimed at training workers, and from on the job training. Practically the only enterprises in the South which are modern, large-scale, technologically advanced and which provide for extensive, on the job training in skills that are important in the modern world are the State-owned industries (chemicals, petroleum, steel, ship-building, mechanical). The real wages paid by these industries, the benefits offered to their employees and the opportunity for advancement (once the on the job training has been provided) are practically as good as in the Northern private firms.¹ Thus there is no economic reason for these Southern, skilled workers to emigrate to the North. The desire to live in cities rather than in rural areas cannot induce them to emigrate to the North either, because these large scale state industries are invariably located in, or at the periphery of large coastal cities (Naples, Salerno, Bari, Taranto, Palermo, Messina, Catania, Cagliari etc.). In addition, Southerners know that they are disliked in the North.²

¹Lutz, Italy - A Study in Economic Development, pp. 229-31.

²For example, it is commonplace in the North to see advertisements in newspapers reading: "Room to let, or engineer wanted--Southerners need not apply." The groan of a Southerner working in Turin is typical: "Those Piemontese, they think they're Swiss, they treat us Southerners like slaves. . . . Sure I make more money in Turin than at home. But I'd rather be in Russia than slave for my so-called countrymen," New York Times, June 5, 1970, p. 8.

Furthermore, the large-scale, technologically-advanced, government-owned industries are run just as private companies: their managers are chosen exclusively on the basis of competence, are not affected by civil service regulations, and their performance is evaluated on the basis of a profit and loss statement in the annual reports (submitted to the government). In these annual reports, the management include all possible reasons to explain the lack of higher profits. These reasons range from the higher cost (than in the North) of importing certain raw materials, higher expenditures on training, etc. But the problem of having to train more and more workers because of the emigration to the North of some of the skilled workers whom they had previously trained never appears as a reason advanced for not having made profits higher than those reported. As a result, these skilled workers are not likely, and historically they have most likely not emigrated to the North.

All other non-agricultural enterprises in the South are very small handicraft establishments which supply only the communal market (macaroni factories, shoe makers, tailors, barbers, construction enterprises, transport firms, etc.). The workers in these enterprises possess skills which are not likely to be important for a modern economy and cannot be properly called "skilled workers" in the sense in which we use this term today. (In any event and as will be seen in the next section, a surplus of these has

always existed and still exists in the South today.) In addition, emigrating farm workers are certainly not skilled.

Turning now to government training programs--the Ministry of Labor of the Central Government (and in cooperation with Cassa) is providing training for some employed and unemployed workers and for some new entrants into the labor force in the South. But the length of time of the courses offered and the amount of money spent on each trainee rules out the possibility of it being a serious attempt at training skilled workers. Thus from 1951 to 1967 (inclusive), an overall total of 340 million dollars were spent to provide technical training to about 2.5 million workers. This represents less than 140 dollars per trainee¹ as compared with a total, explicit, government cost over 2,400 dollars (at 1963 prices) to provide for the "college" education of one student in the mid-1960's.² In addition, it is widely agreed that even the little that was spent on training was badly utilized (as will be seen in Chapter VII). As a result, a worker coming out of such a program cannot be considered to be truly skilled.

Emigrating skilled workers and emigrating professional people could also have received their training within

¹CENSIS, Problemi di Formazione Professionale (Roma: Censis, 1969), pp. 30-34.

²CENSIS, Rapporto sugli Aspetti Finanziari del Sistema Scolastico (Roma: Censis, 1969), p. 39.

the formal education system (Colleges¹ and Universities).² In Table 13 it was seen, that the net emigration of Southerners with a college or university education was, on the average, about 7.5% of the total net emigration from the South (or about 17% of the emigrating workers), for the years 1964, 1965 and 1966. Thus, for these years, over 90% of the net emigration out of the South represented dependents and unskilled workers, and more than 80% of the net emigration of workers must have been unskilled. There is no data on the education of the emigrants prior to 1964, but it can be assumed, fairly confidently, that the net outflow of college and university degree holders from the South and to the North was about equal to (as a percentage of the total) the figures prevailing during the 1964-1966 period. As can be seen from Table 14, the percentage of university degree holders residing in the South was 31.7% of the national total, at the Census date of November 4, 1951, and 31.2% at the Census date of October 15, 1961; while the percentage of college degree holders was 28.6% of

¹It includes the technical institutes mentioned earlier.

²Unfortunately the data available on the skill composition of emigrants is functionally almost completely useless and I decided not to use it. For example, emigrants are placed into three categories: (1) entrepreneurs, managers and white collar workers, (2) working on his own, (3) working for others. In the figures for entrepreneurs are included independent door to door salesmen and those who put up a new factory; more than 50% of the "entrepreneurs" have not even a high school education. SVIMEZ, Mutamenti della Struttura Professionale e Ruolo della Scuola - Previsioni al 1975 (Roma: Svimez, 1961), pp. 1-98.

TABLE 14

UNIVERSITY AND COLLEGE DEGREE HOLDERS IN NORTH AND SOUTH IN 1951 AND 1961

	University		College		Resident Population	
	1951	1961	1951	1961	1951	1961
	(Absolute Values)					
North	292,935	415,180	980,315	1,365,642	29,730,113	32,047,568
South	136,409	188,025	392,476	573,174	17,785,424	18,576,001
Italy	429,344	603,205	1,372,791	1,938,816	47,515,537	50,623,569
	(Percentages)					
North	68.3	68.8	71.4	70.4	62.6	63.0
South	31.7	31.2	28.6	29.6	37.4	37.0
Italy	100.0	100.0	100.0	100.0	100.0	100.0

Source: For 1951: ISTAT: IX^o Censimento Generale della Popolazione, 4 November 1951, Vol. I, Dati Sommari per Comune, Appendice A (Roma, 1956), pp. 15, 25.

For 1961: ISTAT: X^o Censimento Generale della Popolazione, 15 Ottobre 1961, Vol. III, Dati Sommari per Comune, Appendice (Roma, 1966), pp. 14, 24.

the national total in 1951 and 29.6% in 1961. Had there been a much larger proportional outflow (than the one that took place during 1964-1966) of holders of university and college degrees out of the South between the two dates, the proportion (of the national total) still remaining in the South in 1961 would have been much lower than that for 1951. For the years following 1966, the figures are not yet available (they are published with a three year delay).

In conclusion, the following can be stated with respect to the net emigration from the South and to the North since 1951: the net outflow of people from the South was directly related to the prevalence of boom conditions in the North; about 46% of the net migration involved workers, and this percentage remained remarkably stable over time; about 5% of the net outflow of workers came from agriculture; around 90% of the net emigration involved unskilled workers and dependents; less than 20% of the net outflow of workers were skilled or professional people; about 65% of the net emigration involved the 15-35 age group, and 53% were males.

Determination of the Backwash or Spread Effects
of Net Emigration from the South

In this part, it will be determined if this net Northward migration represented a Backwash Effect or a Spread Effect on the South. The case of emigrating university graduates (professional people), college graduates (skilled

workers), unskilled workers, and dependents will be considered separately. The striking conclusion that will be reached is that the emigration of all people--whether professionals, skilled workers, unskilled workers or dependents--was beneficial to the development of the South. They represented surplus or redundant labor. Their emigration caused no reduction in the total output of the South during the period considered. On the other hand, it released the output that these emigrants would have consumed, had they remained in the South. As a result no Backwash Effects were involved; emigration represented entirely Spread Effect as far as the present and prospective development of the South was concerned.

In order to prove beyond doubt that the workers that emigrated from the South to the North represented entirely surplus labor as far as the South was concerned, what is needed is to have an occupational break down of all workers emigrating and to compare this to the unemployment rate in the South by occupation. Unfortunately, such detailed data for skilled workers does not yet exist for the South. Thus the analysis which follows will have to be based on, to a large extent, data of a more general and indirect nature. As a result of this limitation of the data available, it must be stressed that the conclusion reached (particularly with regard to skilled workers who received their training on the job) cannot be accepted with certainty but must be

advanced as being of a tentative nature--until more detailed and complete data will become available.

Let us start with the case of emigration from the South and to the North of holders of university degrees. As can be seen from Table 15, the number of Southerners receiving university degrees increased from about 7,000 in 1958 to about 10,000 in 1966. These yearly figures represent about 34% of the national total. In view of the fact that the South had 33% of the national employed labor force, that it was almost as well provided as the North with university graduates in 1951, that it was underdeveloped, and that employment opportunities opened up at a proportionately much lower rate than in the North (data on this will be presented later in the chapter), there is a prima facie case that a significant part of the yearly flow of university graduates would have been unemployed if they had all remained in the South. More confidence in the previous tentative conclusion can be obtained by looking at the figures of the distribution of the university degrees granted to Southerners, according to faculties. From Table 16 it can be seen that between 55% and 60% of the degrees received were in law, literature, language and history. In the absence of a shortage, it is obvious that the graduates in these fields could not all be employed within the South. That this was indeed the case is confirmed by an excellent study on the employment situation of Southerners who

TABLE 15
 NUMBER OF UNIVERSITY DEGREES GRANTED TO SOUTHERNERS,
 1958-1966

Year	(1) South	(2) Italy	(1) as a Per Cent of (2)
1958	6,989	20,634	33.9
1959	6,968	20,842	33.4
1960	7,302	21,142	34.5
1961	7,649	21,886	34.9
1962	7,639	23,019	34.5
1963	8,319	23,976	37.7
1964	8,978	26,114	34.4
1965	9,583	27,927	34.3
1966	9,919	29,054	34.1

Source: CENSIS, Indagine sui Laureati dalle Università Meridionali nel 1966 (Roma, 1969), p. 2.

TABLE 16
 UNIVERSITY DEGREES GRANTED TO SOUTHERNERS ACCORDING
 TO FACULTIES 1958, 1962, 1966

Faculties	1958	1962	1966
	(Percentages)		
Science	22.6	19.6	17.9
Medicine	12.4	8.9	7.7
Law	31.6	33.5	24.6
Literary (Literature, Language, History)	23.0	24.6	35.3
Business Administration	6.5	9.2	11.0
Other	<u>3.9</u>	<u>4.2</u>	<u>3.5</u>
Total	100.0	100.0	100.0

Source: CENSIS, Indagine sui Laureati dalle Università Meridionali nel 1966 (Roma, 1969), p. 3.

received university degrees in 1966. The study found that one year after graduation, 15% of these Southern university graduates were still unemployed in the South, and 2.5 years after graduation 11.4% still had not found employment! The rate of unemployment in the South ranged from 5% in the sciences to 30.5% in law--and this, 2.5 years after graduation, in years of economic boom, in the face of some emigration to the North (and to other nations), and without considering the additional graduates of 1967 and 1968!¹ The analysis can be pushed one step further: for 1964, 1965 and 1966, the regional data (not just South-North) indicate that the net outflow of Southern university graduates to the four regions of the "industrial triangle" was only about 1/4 of the total, while the net outflow to the single region of Latium, and specifically to the city of Rome, was almost half of the total. Since Rome has practically no industries, this net inflow of Southern university degree holders must have been liberal arts majors, particularly lawyers, who come to Rome to take up civil service jobs.² It can thus be concluded that there was during this period a great surplus of university graduates within the South, in all faculties but especially in liberal arts. If they had all remained in the South they would, in all probability,

¹CENSIS, Indagine sui Laureati dalle Università Meridionali nel 1966 (Roma, 1969), pp. 29, 66.

²ISTAT, Annuario di Statistiche Demografiche 1964-1966 (Roma, 1967-1969).

have remained openly unemployed (as so many in fact did, even with the option of emigration open to them).¹

What was true for the mid-1960's is even more likely to have been true for the 1950's (though, completely satisfactory data do not exist for the 1950's). The stability in the proportion of the university degree holders living in the South out of the national total in 1951 and in 1961; the proportion of the university degrees turned out in the South since 1958 and its composition as to the various faculties; the overall employment opportunities in the South since 1951 (as will be seen shortly); and the sociological aspect of the problem (also to be discussed presently)--all point in the direction that a surplus of university graduates was even more likely to exist in the 1950's than in the 1960's in all branches.

¹The way the figures on these net outflows are computed may conceal some important beneficial effects on the South. The composition of the opposite flows giving rise to the net outflow observed, may be different. Thus the inflow of university graduates from the region of Latium to the South may involve mostly liberal arts graduates who, disillusioned with the capital, return to the South; but the inflow from the industrial triangle and to the South, may involve many Northern-born and very highly trained and experienced technical personnel (with skills not available in the South) who came to the South to set up and run the large-scale and technologically advanced government projects (steel, petroleum, chemical, etc.) designed to industrialize the South. Thus, though there was a net outflow of Southerners with university degrees to the North, in the process the South very likely exchanged some of its graduates with skills which were redundant in the South, for some that were very important but very scarce in the South. (Northern universities are generally much better than Southern ones in the sciences and have some faculties, which Southern universities lack entirely.)

Throughout the 1950's, the overall rate of open unemployment in the South (not only university graduates) was over 10% and the rate of marginal employment (those who worked less than 32 hours/week throughout the year) was double that. Since 1951, emigration out of the South (both internal and to other nations) must have worked to constantly reduce unemployment within all skills--including professional people. Thus it is likely that the excess supply of people with a university education was even larger (but certainly not smaller) in the early part of the period (1951-1967), than in the latter.¹ It is indeed unlikely that a university graduate, whichever his faculty, would have emigrated if he could have found employment--almost any employment--within the South. Thus in the study mentioned earlier, university graduates who had actually found jobs in the South were asked if they felt that a university education was needed for their present occupation or whether it could have been satisfactorily performed with much less education. More than 30% answered that no university education was needed to adequately accomplish the work they were presently doing. Less than 30% of the science majors had wanted to teach; however, almost 70% of those who did find employment in the South were teaching two years after

¹Giuseppe De Meo, "Evoluzione Storica e Recenti Tendenze delle Forze di Lavoro in Italia," Giornale degli Economisti (Luglio-Agosto, 1969), p. 412.

graduation because they could not find employment in industry within the South.¹

In addition, since Northerners discriminate and dislike Southern emigrants whatever their educational level, university graduates may have been even more reluctant than common laborers to emigrate to the North if they could find some sort of employment within the South. It can thus, fairly safely, be concluded that no job requiring a university education--whichever the faculty--was left unfilled in the South because of emigration. The number of unemployed university graduates remaining in the South during the entire 1951-1969 period is likely to have been much larger than those within the same faculty who emigrated plus the number of the frictionally unemployed. Emigrating university graduates must have represented unusable resources for the South and the fact that they embodied a great deal of human capital is completely irrelevant. Their emigration released their consumption but did not affect regional output.

Let us now turn to the emigration of "college" graduates (skilled workers). Ideally, what would be required here, is to have the yearly unemployment rate for the various skilled occupations. If this rate, after excluding say 2 or 2.5% for the frictionally unemployed, resulted in a number of unemployed for each and all skilled occupations

¹CENSIS, Indagine sui Laureati . . . , pp. 55-60.

within every region of the South, which greatly exceeded the number of emigrants embodying those skills, for every year--then, and only then, it could be concluded with certainty that the emigration of all skilled workers represented entirely surplus or redundant labor for the South. Data are available to show that this is indeed the case for the emigration of "unskilled" labor. Such data for skilled workers in the South is not available; therefore, the same procedure will have to be followed as the one used for the emigration of university graduates. As a result, as in that case, the conclusions that will be reached are very likely to be correct, but they cannot be accepted with complete certainty.

First, as it was seen in Table 14, the South was almost as well provided as the North with "college" graduates, in both 1951 and 1961. In fact the proportion of "college" graduates out of the national total increased in the South from 28.6% in 1951 to 29.6% in 1961. Therefore, on an overall level, it is unlikely that a shortage of them existed in the South between these two dates.

Secondly, the proportion of the Southern population aged 14-19 attending "colleges" (or other technical institutes) was almost as large as the national figure: 46% as opposed to 48% for the North. But since the South, with 36% of the national resident population and 33% of the national labor force, accounted for 41% of (the national

total of) the 14-19 age group, it ended up with a higher percentage of "college" graduates in relation to its population and labor force than the North!¹ This conclusion, inferred from the study mentioned in footnote 1 of the previous page, is confirmed by the figures in Table 17 that follows. Obviously, the South, already fairly adequately provided with "college" graduates, being underdeveloped, and with its overall employment growing at a slower rate than in the North (data on this aspect will be presented later), could not have employed all its new "college" graduates.

Thirdly, just as in the case of university students, too many Southern "college" students majored in liberal arts producing an enormous surplus--particularly of elementary school teachers. From Table 17 it can be seen that while the flow of new graduates in the technical fields was more than adequate in the South (30.9% of the national total for the South as compared to less than 20% of the national industrial output and 24% of the national industrial employment), the flow of new teachers and liberal arts majors was definitely over-excessive. In both cases, more than half of the national total arose in the South.² It is

¹ISTAT, Indagine Speciale su Alcuni Aspetti della Vita Scolastica Italiana, in Note e Relazioni (Roma, Jan. 1967), pp. 22-37.

²The reason for reporting only the figures for the year 1966 in Table 17 is because they are the most recent available, they are very representative of what happened for the entire 1951-1966 period, and prevents unnecessarily

TABLE 17

STUDENTS GRADUATING FROM "COLLEGES" AND SIMILAR INSTITUTIONS
IN SOUTH AND NORTH, JUNE 1966

	Type of "College"			Total	Technical Institutes	Total "Colleges" and Institutes
	Liberal Arts	Teachers	Science			
(Absolute Values in Thousand)						
North	13.0	17.0	9.3	39.3	85.9	125.2
South	15.3	17.7	4.0	37.0	38.5	75.5
Italy	28.3	34.7	13.3	75.3	124.4	200.7
(Percentages)						
North	45.9	48.7	69.9	50.7	69.1	62.4
South	54.1	51.3	30.1	49.3	30.9	37.6
Italy	100.0	100.0	100.0	100.0	100.0	100.0

Source: ISTAT, Annuario di Statistica dell'Istruzione Italiana, Vol. XVII, 1966
(Roma, 1968), p. 381.

common knowledge in Italy that the ratio of the number of applicants to each new teaching position that opens up throughout Italy, is more than 10 to 1, even today. Most of these applicants are Southerners. What also comes out from Table 17 is how small the percentage of Southern emigrants with a "college" education is in comparison to the total number of new graduates in the South during the same year. For 1966, this percentage was only 5%.

Fourth, almost half of the yearly net outflow of "college" graduates from the South go to the capital and must hence be liberal art majors going to Rome to work for the government. Most of the rest are most likely unemployed teachers in the South who move to the North to fill new teaching positions.

All that has just been said about the "college" graduates of the South proves almost beyond doubt that there was (and is) a large surplus of them in the South and that emigration must have alleviated but not eliminated this surplus. However, it is at least a possibility that this overall picture might conceal the case of specific skilled occupations for which a shortage existed in the South--a shortage which resulted from emigration.¹ But a closer look

lengthening this dissertation. Data on all previous years is readily available in the Annuari Statistici dell'Istruzione Italiana, for 1951 to 1965, also published by ISTAT.

¹If Southern "colleges" did not have these, among their faculties, this shortage could not possibly have

at the figures for 1966 can dispell any such belief. For that year, it was seen that a net outflow of less than 4,000 "college" graduates took place (Table 13); since almost half of this net outflow went to Rome and must have represented liberal arts major (p. 124) a net emigration of about 2,000 for that year is left. Even if, for a moment, we disregard the fact that most of them must have been teachers and other liberal arts graduates, and assume that this entire figure (2,000) represented technical personnel (graduates of technical institutes and "college" graduates in the sciences), this would have reduced the number of them still remaining in the South out of the 1966 graduating class from 42,500¹ to 40,500 (Table 17). This would have decreased the new technical personnel available to the South from 30.9% of the national total to 29.4%, but would have still assured adequate supply to satisfy the South's needs, since in 1966, the South had an industrial output of less than 20% of the national total, it employed 24% of the national industrial labor force and the growth of its

resulted from emigration. In fact in this situation (and as pointed out also for the case of university graduates) the overall figures from which the net figures are obtained hide the fact that the South must have obtained many Northern-born and trained skilled workers which the South could supply for itself. Some of the returning Southern workers may also have acquired some skills in the North that were needed in the South.

¹By adding the number of college graduates in the sciences and the number of graduates of technical institutes in the South in Table 17.

employed, industrial labor force increased by less than 29% of the total national increase since 1951.¹

In addition, as pointed out for the case of university graduates, "college" graduates would probably accept almost any job (even one for which no "college" education was needed) before emigrating, and they would emigrate only after they had remained unemployed for relatively long periods of time. Hence, most likely, no shortage resulted in the South from the emigration of part of its skilled labor force--whichever the skill considered. This is even more likely to have been true in the 1950's in view of the greater unemployment rates (greater in relation to the North at the same time or to the South in the 1960's) then prevailing in the South. Thus, in 1953, a high-level government commission which studied for over one year the various aspects of the problem of unemployment in Italy (particularly in the South), and the relation of emigration from the North to other nations and from the South to other nations and to the North concluded that: "It does not seem that emigration--in the present state of affairs in Italy--results in a shortage of skilled workers."² Thus, throughout the period considered (1951-1967), it is likely that

¹ISTAT, Occupazione in Italia . . . , p. 13.

²Commissione Parlamentare sulla Dissoccupazione, Inchieste Speciale sulla Disoccupazione, III, Sect. 3 (Roma, 1953), 245-46.

all the college graduates who emigrated were unusable and represented redundant labor for the South.

For the emigration of unskilled labor from the South, a much stronger case can be made that it represented entirely surplus labor (M. P. = 0) over the period considered. The number of unemployed workers, excluding the number of the "frictionally" unemployed, greatly exceeded the number of emigrating workers, throughout this period. The unemployment figures should include the "unemployed-equivalent" for the marginally employed; that is, since "marginally employed" refers to employees who worked less than 32 hours per week, throughout the year,¹ one-fifth of that figure for each year has been included in the number of unemployed workers to get the total number of "effectively" unemployed. In Table 18, the labor force of the South has been broken down into employed and unemployed workers. The unemployment figures for the years 1952-1958 have been obtained by dividing the national unemployment figure by 3 (and have been put in parenthesis). This represents an underestimate of the number of unemployed in the South as confirmed by a special study on unemployment in the South for the mid-1950's.² For example, in Table 18 the number of unemployed in the South in 1957 is taken to be 500,000,

¹ISTAT, Occupazione in Italia . . . , p. 5.

²SVIMEZ, Le Forze del Lavoro del Mezzogiorno dal 1954 al 1958, N. 69 (Roma, Maggio 1959), p. 6.

TABLE 18

LABOR FORCE, NUMBER OF UNEMPLOYED AND EMIGRATING WORKERS FROM THE SOUTH, 1951-1968
(In Thousand)

	1952	1953	1954	1955	1956	1957	1958
(1) Labor Force	7,162	7,185	7,212	7,128	7,058	6,976	6,977
(2) Employed	6,524	6,560	6,607	6,560	6,523	6,476	6,482
(3) Unemployed	(638)	(625)	(605)	(568)	(535)	(500)	(495)
(4) Unemployed-Equivalent (From Marginally Employed)	333	329	315	310	303	304	304
(5) Total Number of Unemployed	971	954	920	878	838	804	799
(6) Frictionally Unemployed	179	180	180	178	176	174	174
(7) Residual Unemployment	792	774	740	700	662	630	625
(8) Emigrating Workers	32	28	31	30	32	34	37
(9) Remainder	760	746	709	670	630	596	588

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
(1)	6,871	6,798	6,669	6,583	6,327	6,305	6,263	6,251	6,380	6,196
(2)	6,454	6,472	6,369	6,336	6,127	6,099	6,033	5,976	6,101	5,897
(3)	417	326	300	247	200	206	230	275	279	299
(4)	292	259	234	192	177	140	174	140	114	--
(5)	709	585	534	439	377	346	404	415	393	--
(6)	171	170	167	165	158	158	157	156	160	155
(7)	538	415	367	274	219	188	247	259	233	--
(8)	47	60	110	104	89	51	24	33	55	68
(9)	491	345	257	170	130	137	223	226	178	--

Source: For (1): By adding columns (2) and (3).

For (2) and (4): ISTAT, Occupazione in Italia negli Anni 1951-1967, p. 27.
For 1968 same source as for (2) south

(3) Unemployed	(638)	(625)	(605)	(568)	(535)	(500)	(495)
(4) Unemployed-Equivalent (From Marginally Employed)	333	329	315	310	303	304	304
(5) Total Number of Unemployed	971	954	920	878	838	804	799
(6) Frictionally Unemployed	179	180	180	178	176	174	174
(7) Residual Unemployment	792	774	740	700	662	630	625
(8) Emigrating Workers	32	28	31	30	32	34	37
(9) Remainder	760	746	709	670	630	596	588

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
(1)	6,871	6,798	6,669	6,583	6,327	6,305	6,263	6,251	6,380	6,196
(2)	6,454	6,472	6,369	6,336	6,127	6,099	6,033	5,976	6,101	5,897
(3)	417	326	300	247	200	206	230	275	279	299
(4)	292	259	234	192	177	140	174	140	114	--
(5)	709	585	534	439	377	346	404	415	393	--
(6)	171	170	167	165	158	158	157	156	160	155
(7)	538	415	367	274	219	188	247	259	233	--
(8)	47	60	110	104	89	51	24	33	55	68
(9)	491	345	257	170	130	137	223	226	178	--

135

Source: For (1): By adding columns (2) and (3).

For (2) and (4): ISTAT, Occupazione in Italia negli Anni 1951-1967, p. 27.
For 1968, same source as for (3) next.

For (3): ISTAT, Rilevazione Nazionale delle Forze di Lavoro (Roma, 11 Ottobre 1968), pp. 55-56. This gives summary figures for 1959 to 1967 also. For 1952 to 1958, see: Enrico Capperdoni, Lo Sviluppo Italiano del Dopoguerra (Padova: Marsilio Editori, 1968), p. 188.
The meaning of the parenthesis is explained in the text.

For (5): By adding columns (3) and (4).

For (6): By multiplying column (1) by 2.5%.

For (7): By subtracting column (6) from column (5).

For (8): From Table 11.

For (9): By subtracting column (8) from column (7).

while in the study just mentioned, 526,000. To the number of unemployed one-fifth of the figure of the marginally employed has been added to get the number of "effectively" unemployed. From the latter figure, the number of "frictionally unemployed"¹ has been deducted and from the resulting total, the number of emigrating workers from the South has been subtracted. This gives us the numbers of line (9), which are always positive and are always more than double the number of emigrating workers in a given year (it was from 6 to 25 times larger in the 1950's and from 1.5 to 8 times larger in the 1960's). This is true not only for the South as a whole, but also for every region of the South and for every sector of its economy.² Thus, the emigration of unskilled workers from the South represent, with a high degree of certainty, surplus or redundant workers. Without emigration they would have remained completely unemployed. As seen before, the same can be said, but with somewhat smaller degree of confidence, for emigrating skilled workers and professional people.

It would have been profitable to retain all or some of these workers only if enough capital had been available to employ them. To provide for non-agricultural employment (say 50% in industry and 50% in services) for the 850,000

¹Frictional unemployment in Italy is usually taken to be 2.5% of the labor force. See De Meo, "Evoluzione Storica . . . ," p. 422.

²Same sources as those for Table 18.

workers who emigrated to the North from 1952 to 1968, at least two billion dollars would have been needed.¹ The actual capital requirements would have been much more, however, because (1) in the course of development it is usually necessary to increase the K/L ratio (capital deepening)² and (2) most of the emigrants were young couples who would have had children that eventually would have entered the labor force and they, too, would have had to be provided with equipment (otherwise there would have been a fall in the overall K/L ratio in the South). But even disregarding these important qualifications, it is impossible to see how two billion dollars could have been provided within the South. It is true that some of the savings of the South were invested in the North during this period, but as it will be seen in the next chapter, this is indeed a very small amount. Also to be rejected is the view that because of emigration, the availability of skilled workers within the South was so reduced as to discourage the inflow of Northern private capital to the South. As it was seen, Southerners emigrate only after having remained unemployed for a relatively long period of time and there was as a

¹Table 7, page 36; also Alessandro Molinari, "Localizzazione Industriale e Costi Sociali dell' Inseidamento di Nuove Unità Lavorative," in Mezzogiorno nelle Ricerche della Svimez 1947-1967 (Roma: Svimez, 1967), pp. 273-78.

²Edwin P. Reubens, "Capital-Labor Ratios in Theory and in History: Comment," The American Economic Review (December 1964), pp. 1052-69.

result never a shortage of skilled workers in the South created by emigration. Only if the increasing surplus of skilled workers in the South pushed their wages down sufficiently, could Northern private capital be induced to flow and be invested in the South. However, wages in Italy are negotiated on a national level and real wages in the South are practically as high as in the North even in the face of widespread unemployment and underemployment in the South.¹

Not only did the emigration of workers out of the South represent surplus labor for the period 1952-1968, but it is unlikely that this emigration will cause a shortage of labor (whether skilled or unskilled) in the South in the future. The number of new graduates turned out by Southern colleges and universities each year is likely to be more than adequate (especially in liberal arts) for the future development and growth needs of the South, while the number of unskilled workers is certainly going to be excessive. Thus Professors Livi Bacci and Franco Pilloton have estimated (on the expectation of birth rates and death rates

¹In fact, one of the results of the general strikes that plagued Italy during the spring of 1969 was an agreement to make illegal any North-South money wage differential for the same occupation (New York Times, December 7, 1969, sec. IV, p. 2). This may actually make real wages higher in the South since costs of living are generally lower there than in the North. According to Neo-Classical Economists, the widespread unemployment that existed in the South throughout this period resulted precisely because of the national wage policy and could be cured by sufficiently lower wages in the South.

continuing to fall in the South, as in the past 20 years) that from 1966 to 1981, the South (which in 1966 had 36% of the population and 33% of the labor force of Italy), will contribute from 75% to 80% of the natural increase in the national labor force.¹ This will not only assure enough labor for the South in the foreseeable future but will necessitate a great deal of continued emigration. Without emigration, open and disguised unemployment within the South would very likely increase very much and the structural change necessary for its development hindered, or even reversed.

There is little to say on the emigration of dependents out of the South. This emigration did not reduce the regional output but released their consumption, and thus it represented a benefit or Spread Effect on the South.

The picture given on internal (South-North) migration would not be complete without a few words on the emigration of Southern workers to other nations. From 1951 to 1968, from 800,000-900,000 workers emigrated from the South to other nations. However, while over 95% of the 850,000 workers who emigrated from the South to the North, over the same period, came from non-agricultural pursuits, almost all the workers who emigrated to other nations came from agriculture. Almost none were college or university graduates.

¹Livi Bacci and Franco Pilloton, Popolazione e Forze di Lavoro delle Regioni Italiane al 1981 (Roma: Svimez, 1968), pp. 1-220.

This emigration of farmers out of the South (together with about 600,000 reduction in the agricultural labor force from attrition) made it possible to reduce the agricultural labor force of the South from 3,700,000 in 1951, to 2,150,000 in 1967 or by about 53%.¹ During the same period, the value of the agricultural output of the South (at 1963 prices) increased by 40%, or by about 25% per year.² Since the real per capita income of employed agricultural workers increased by 82% over the same period, and the area under cultivation remained practically unchanged (as seen in Chapter IV), emigrating agricultural laborers must have represented, to a very great extent, employed but surplus (M. P. = 0) labor,³ since it is very unlikely that agricultural output could have increased by more than 2.5% per year as a result of technological improvements. That most of the emigrating farm laborers represented surplus labor for the South could also be inferred by considering that 57% of the employed labor force of the South in 1951 was in agriculture, especially in view that so little fertile land was available per farm worker. It must be mentioned that

¹ ISTAT, Occupazione in Italia . . . , pp. 17, 47-49.

² ISTAT, I Conti Economici Nazionali e Territoriali dell'Italia Anni 1951-1967, pp. 17, 43.

³ More work would be needed however, to completely justify this conclusion. (This whole subject could be treated in terms of Optimal Population Theory.) This is not done here because I am primarily interested in the net South-North migration.

France which is endowed with much more fertile, agricultural land per farmer than the Italian South, has less than 20% of its labor force in agriculture. In 1967, the South had still more than 35% of its employed labor force in agriculture.¹

Thus it seems likely that the emigration from the South of all workers, skilled and unskilled, farmers or non-farmers--whether they emigrated to the North or to other nations represented in the most part unusable resources for the South. In the rest of this chapter (and this dissertation) I will be interested almost exclusively with the net South to North migration only--and this will be taken to have involved no Backwash Effect.

Measurement of the Spread Effect of Emigration

In this section an attempt will be made to get a monetary estimate of the size of the Spread Effect of emigration on the South. The actual calculation is carried out in Table 19.

In Table 19, column (1) gives the net real per capita output in the South per year at 1963 market prices. The figures of column (2) (which were obtained by dividing the corresponding figures of column 1 by 5) give an estimate of the yearly private and public consumption per capita that

¹ISTAT, Occupazione in Italia . . . , p. 49.

TABLE 19

ESTIMATES OF THE SIZE OF THE REAL BENEFITS, PER PERSON
REMAINING IN THE SOUTH, PER YEAR, RESULTING FROM
THE NET EMIGRATION TO THE NORTH, 1952-1968

Year	(1)	(2)	(3)	(4)	(5)	(6)
1952	333	67	70	4,690	0.26	0.08
1953	367	73	131	9,563	0.53	0.14
1954	367	73	197	14,381	0.79	0.22
1955	372	74	262	19,388	1.08	0.29
1956	388	78	326	25,428	1.41	0.36
1957	413	83	403	33,449	1.86	0.45
1958	424	85	488	41,480	2.30	0.54
1959	437	87	588	51,156	2.84	0.65
1960	448	90	720	64,800	3.41	0.76
1961	489	98	961	94,098	4.95	1.01
1962	498	100	1,187	118,700	6.25	1.26
1963	537	107	1,391	148,837	7.83	1.46
1964	543	109	1,511	164,699	8.67	1.60
1965	574	115	1,564	179,860	9.47	1.65
1966	591	118	1,635	192,930	10.16	1.72
1967	632	126	1,755	221,130	11.11	1.76
1968	633	127	1,901	241,427	12.71	2.01
Total	--	--	--	1,626,016	85.63	--

Legend:

- (1) Net Real Per Capita Output of the South at 1963 Market Prices.
- (2) Private and Public Consumption per Capita of Emigrants Paid for by the South (this equals 20% of column 1; see discussion in text).
- (3) Cumulative Number of Emigrants from the South to the North, in thousands (see discussion in text).
- (4) Column (3) times column (2); in thousands of dollars at 1963 prices. (This represents the value of that part of the total consumption paid for by the South and released per year by emigration.)
- (5) (4) divided by the Resident Population of the South. (This represents a dollar estimate of the real benefit from emigration accruing to each person remaining in the South.)
- (6) (5) as a percentage of (1).

Source: For (1): ISTAT, I Conti Economici Territoriali dell'Italia per gli Anni 1951-1967, pp. 25-30; for 1968: G. Tagliacarne, "I Conti Provinciali e Regionali," Moneta e Credito (December 1969), p. 15.

For (2): As explained in text.

For (3): From Table 11.

For (5): The figures of the Resident population of the South were taken from: SVIMEZ, Le Migrazioni Interne nel Periodo 1952-1966; for 1967 and 1968: ISTAT, Popolazione e Movimento Anagrafico dei Comuni (Roma: ISTAT, 1968 and 1969), pp. 1-5 in both volumes.

the South would have spent on an "average" emigrant¹ if he had remained in the South. The justification for taking 1/5 of the per capita output as an estimate of the per capita public and private consumption released in the South by a "typical" emigrant, stems from the following considerations. It has been estimated by several independent studies that the "average" emigrant would have consumed about 1/3 of the real per capita output of the South per year in the form of private (unemployment insurance) and public consumption, if he had not emigrated.² However, only about 65% of the public and private consumption of unemployed workers and their dependents in the South was actually paid by the South. The rest was contributed by the North.³ This leaves

¹Emigrants include adults and children. In the studies cited later, an "average" emigrant refers to one whose consumption is equal to the consumption of all the emigrants if they had not emigrated divided by the number of emigrants (adults and children). The reason for talking about an average or typical emigrant in the text will become evident in a moment.

²Giuseppe De Meo, "Redditi e Prodottivita' in Italia 1951-1966," Annali di Statistica, Anno 96, Serie VIII, Vol. 20 (Roma: ISTAT, 1967), p. 135; M. Talamo, "Sul Valore Monetario del Capitale Umano e Sue Applicazioni alle Misure della Prodottivita'," Annali di Statistica, Anno 94, Serie VIII, Vol. 15 (Roma: ISTAT, 1965), pp. 187-191; A. Giannone, Spese di Produzione e Reddito Nazionale (Roma: Societa' Italiana di Statistica, 1957), pp. 20-21; SVIMEZ, Fenomeni Economici Caratteristici . . ., pp. 21-24; ISTAT, Indagine Campionaria sui Consumi delle Famiglie (Roma: ISTAT, 1969), pp. 2-5.

³Total ordinary government expenditures in the South (education, health, public order, etc.) was about 26,861 million dollars, at 1963 prices, from 1951 to 1968. Of this, 17,559 million dollars came out of taxes raised in the South and 9,302 from transfers from North to South through

us with about 20% or 1/5 of the yearly real per capita output of the South as the estimate of the consumption released in the South per year by the departure of an "average" emigrant. Column (3) gives the cumulative number of emigrants from the South to the North. A cumulative figure is obtained because the emigrants in any particular year released their consumption not only in the year they emigrated but also in the remaining years of the period considered (1952-1968). Column (4) was obtained by multiplying the figures of column (3) by those of column (2) and represents that part of the total consumption which the South would have incurred during each year in the absence of the emigration that took place during that same year and the emigration since 1952. The total burden that would have been incurred by the South from 1952 to 1968 in the absence of emigration was about 1.6 billion dollars at 1963 prices (the total of column 4). Column (5) was obtained by dividing the figures of column (2) by the resident population of the South at the end of each year. It gives the value of

the fiscal system (see Table 31, Chapter VII). Therefore, about 35% of the ordinary government expenditures on public consumption in the South were financed by the North. Also, approximately the same percentage of the unemployment insurance paid to Southern unemployed workers came from the social security deductions from the payroll of Northern workers (see CENSIS, Rapporto sulla Situazione Sociale del Paese, Vol. I, Roma, 1969, Section IV, pp. 11-13). Therefore, only about 65% of the public and private consumption of the unemployed workers and their dependents in the South represented a burden on the South. The rest was paid by the North.

the output released per year and available, on the average, to each person remaining in the South. Finally, column (6) gives the percentage which the figures of column (5) are to the corresponding figures of column (1). Column (5) and (6) thus represent a measure of the Spread Effect on the South from 1952 to 1968 resulting from the emigration of part of its population to the North. The value of this Spread Effect ranged from 0.26 dollars (in 1952) to 12.71 dollars¹ (in 1968), or from 0.08% (in 1952) to 2.01% (in 1968) of the net real per capita output of the South per year. Thus, of the \$300 increase in the real per capita income that occurred in the South over the 1952-1968 period, about \$86 or 29% resulted from emigration to the North.²

¹All in 1963 prices.

²To be precise from the overall benefit resulting in the South because of the emigration, we would have to deduct the frictional loss of production when an employed worker emigrates--before a replacement is hired, and also the cost of transportation involved in emigration, if incurred by the South. No data is available on the first aspect but it is likely to have been very small since most emigrants were openly unemployed. The cost of transportation between Palermo and Milan is about \$50, but the majority of emigrants move over shorter distances and in many cases the traveling expense is paid by their relatives who have already emigrated. Thus the frictional loss of output and the cost of transportation involved in emigration affect the above conclusions only very slightly, if at all. The personal savings that some emigrants might have brought with them upon emigrating and the remittances that they sent back home after finding employment in the North, will be considered in Chapter IV, where the movement of capital will be taken up.

Concluding Remarks

From this chapter, it can be concluded that emigration, far from being harmful to the development of the South, was an important cause of the increase in the net real per capita income that took place there from 1952 to 1968. (It was also responsible for increasing the ratio of the "effectively" employed to the total labor force of the South.) It is true that these emigrants, and especially those with college or university education, embody a great deal of human capital,¹ but their emigration does not seem to have proved harmful to the South. To measure the benefits accruing to the region of immigration (whatever they are) and to say that they represent an equal loss for the region of emigration, completely misses the point. The gain to the first need not mean an equal loss to the latter. Indeed both regions may gain. This is precisely what seems to have taken place in Italy: The North would have suffered a shortage of manpower (just as Germany, Switzerland, etc., did) which would have retarded its phenomenal growth.²

Myrdal's and Hirschman's intuition was dramatically wrong--at least in the South-North migration in Italy. This

¹Estimates of the amount of human capital embodied in the various categories of emigrants will be given in Chapter VII. Of course this work would have had to be done in this chapter for that part of emigration that represented a Backwash Effect on the South, if such Backwash Effect had in fact occurred.

²Evidence for this statement will also be given in Chapter VII.

is particularly significant since they had first and foremost in their mind precisely the case of Italy.¹ It is true that most emigrants were young, a great many of them were workers, and many were skilled and educated. It is also true that the age distribution of the region of emigration was adversely affected (more on this in Chapter VII), but all of this did not make emigration harmful to the Italian South. Of course no generalization to other cases can be made from the Italian experience. As it was pointed out earlier, conditions differ from case to case and it would be expected that conclusions also should differ. Thus each case must be investigated individually. What the Italian experience does do, however, is to open up a breach in what was once taken for granted by many economists; that is, since emigration removes the young, the workers, the skilled and the educated, it must necessarily be harmful to the area of emigration. What this chapter does show is that in the South-North migration along with workers many dependents also emigrated; along the skilled many more unskilled left; but most important, it points out that whether the emigration of any person is harmful to the region of emigration depends not so much on how skilled the emigrant is but on what are the prospects of fruitfully employing him at the time of emigration or during the

¹Myrdal, Rich Lands . . . , pp. 28-29; Gunnar Myrdal, An International Economy, pp. 346-47; Hirschman, The Strategy . . . , p. 189.

period considered (here 1952-1968), in the area of emigration.¹ Since there was no shortage in the South (over the period considered) for the type of workers who emigrated, the South-North emigration that took place from 1952 to 1968 must be regarded as beneficial to the South.²

¹Myrdal, but also Hirschman, and in fact most of the less careful economists seem to completely miss this point. To them the emigration of a skilled worker from an under-developed area must necessarily be harmful to it. They thus look only at the supply side of the problem, but to establish a harmful effect, a shortage of the particular skill must be shown to have resulted, and the only way to show that, is to look at the Quantity Supplied and the Quantity Demanded, of the particular skill involved.

²This is not to deny that the South incurred a great cost in raising these emigrants (an estimate of this cost will be given in Chapter VII). But to the extent that the workers so raised represented surplus labor in the South, the cost incurred in raising them (which, as it was seen, was shared by the North) represented a fixed or sunk cost as far as the South was concerned.

CHAPTER IV

THE MOVEMENT OF CAPITAL

Introduction

In this chapter the second of the three broad movements--the movement of capital--will be considered. The interregional flow of savings, the inflow of Northern direct investments to the South, and the inflow of emigrants' remittances to the South will be taken up separately. As in Chapter III, the procedure followed will be, first, to establish the flows that took place, then to determine if the flows involved were beneficial or harmful to the South; an estimate will follow as to the actual monetary value of the benefit or harm in the South resulting from each flow; finally, the net effect on the South of all the flows discussed will be considered.

Interregional Flow of Savings

Myrdal believes that "the banking system, if not regulated to act differently, tends to become an instrument for siphoning off the savings from the poorer regions to the richer and more progressing ones" ¹ Hirschman holds

¹Myrdal, Rich Lands . . ., p. 28.

similar views.¹ Indeed the belief that the unhampered operations of the market mechanism would drain a poor area of most of its savings is a widely accepted belief.² This belief, however, is usually given without any theoretical justification (other than by saying that in a more developed area returns to investments are usually higher than in a poor area, and therefore, savings flow from the latter to the former) and almost never any data is given to prove it.

Having stated that there is usually an outflow of savings from the poor area to the rich one, they then always take it for granted that such an outflow of savings is harmful to the poor region, without considering whether the savings involved could and would have been profitably employed in the poor region or would instead have remained idle.

The outflow of savings from an underdeveloped to a developed region may take the form of an outflow of bank savings, postal savings, the purchase of stocks, the purchase

¹Hirschman, The Strategy . . ., pp. 187-89.

²United Nations, Economic Commission for Europe, Economic Survey of Europe, 1953 and 1954, pp. 130-37 and 152-53, respectively; Werner Baer, "Regional Inequality . . .," 269, 284; and many others. Both U.N. references cite the Italian South as an excellent example of a case where the poor region is hurt by the outflow of most of its savings to the North. Of course, the writings of the "Meridionalisti" (those Italian economists--mostly from the South--who stress the need for greater government aid to develop the South) such as Compagna, Graziani, Rossi Doria, Galasso, Saraceno, etc., all stress the fact (but never present any data) that a great deal of the savings of the South are not used to create jobs in the South but are invested in the North.

of life insurance, direct real estate purchases, or the outflow of currency (bills) itself.¹

All of these possible ways by which the savings of the South can flow to the North will be considered; however, most of the attention will be focused on bank savings because (as it will be seen) they represent by far the most important form by which a South-North flow of savings could occur.

In the modern world the monetary authorities set, determine, or at least influence (in the course of their conduct of monetary policy) the structure of interest rates² for the nation as a whole,³ rather than allow it to be determined by market conditions alone. If the structure of interest rates set by the monetary authorities were higher than the one that would prevail if it were determined by the demand and supply conditions alone,⁴ and if as a result a surplus of investment funds arises in both regions, then

¹These, of course, do not represent all the ways by which savings can occur, but only those forms of savings which lend themselves to be "exported" out of the region in which they arise.

²In the course of Open Market Operations, monetary authorities deal mostly in Treasury Bills (very liquid or short-term government bonds), but all the other rates of interest are rather closely related and thus influenced by these very short-run interest rates.

³Special credit incentives could then, and are usually, granted to the poor region. This will be considered later.

⁴This might be so in order to curb inflationary pressures in the economy.

there would be no reason for some part of such surplus investment funds to flow from the poor to the richer region. A flow of investment funds from the underdeveloped to the developed region could or would occur either if at the structure of interest rates set, there results a shortage of investment funds (relative to investment opportunities) in the richer region paralleled or concomitantly with a surplus of them in the poorer region, or if at the prevailing market rate of interest, funds generated in the poor region and which would have been invested there, flow to the rich region instead, because returns to additional investments are higher in the latter. In the first of these two cases, the outflow of investment funds from the underdeveloped region could not be regarded as harmful to it, as long as a surplus of them still remains there after such an outflow comes to an end. In the absence of such an outflow, the investment funds remaining idle (excess reserves) would be even higher in the poor region and would at the same time deprive it of the return it would receive when it invests these funds in the developed region. In the second case, however, the outflow of investment funds raised in the poor region would be detrimental to it because they would have been invested in this poor region (even if less profitably than in the richer one) but were instead lost to it.

(Against this loss, the higher return that these funds would earn in the more developed region over what they could have earned in the less developed one, would have to be deducted).

Under modern conditions (where the interest rate structure is not determined by free market forces but by the monetary authorities), the last case discussed is the only situation where an outflow of investment funds from the poor region was both possible and harmful to it. It is this case that economists who say that the poor region is hurt by the loss of part of its savings to the richer region, must have in mind. But the case just considered is one of several possibilities, and no conclusion can be reached as to whether or not an outflow of funds from the poor to the rich region (after having established it) is detrimental to the former, without considering the particular conditions under which it took place. What happened in the Italian case over the period 1950-1968 is shown by Table 20, that follows.

This table gives the figures for the North and the South, separately. All figures are expressed in millions of dollars, in terms of 1963 prices (so as to make them comparable to the figures in the other tables). Columns (1) refer to total bank deposits (demand deposits, time deposits, and saving deposits) in all banks, in the North and in the South, on December 31 of each year. Of the total bank deposits, between 50 and 55% in the North and 65-70% in the South represent time and saving deposits; the rest were demand deposits. These percentages have remained fairly constant over the entire period.¹ The change between

¹SVIMEZ, Fenomeni Economici Caratteristici ... , 18.

TABLE 20

BANK DEPOSITS, REQUIRED RESERVES, FUNDS AVAILABLE, AND FUNDS USED
IN THE NORTH, AT YEAR END, 1950-1968:
(In Million of Dollars, at 1963 Prices)

Year	(1) Deposits	(2) Legal Reserve Requirements	(3) = (1) - (2) Funds Available for Use	(4) Funds Actually Used	(5) = (3) - (4) Excess of Funds Available over Uses
1950	5,300	1,325	3,975	4,070	- 95
1951	6,094	1,524	4,570	4,461	109
1952	6,984	1,746	5,238	5,143	95
1953	8,056	2,014	6,042	5,877	165
1954	8,889	2,222	6,667	6,569	98
1955	9,820	2,455	7,365	7,313	52
1956	10,436	2,609	7,827	8,015	- 188
1957	11,543	2,886	8,657	8,776	- 119
1958	12,813	3,203	9,610	9,098	512
1959	15,356	3,839	11,517	10,453	1,064
1960	17,256	4,314	12,942	13,120	- 178
1961	19,516	4,879	14,637	14,002	635
1962	21,141	4,757	16,384	15,833	551
1963	21,787	4,902	16,885	17,682	- 797
1964	22,524	5,068	17,456	17,231	225
1965	26,126	5,878	20,248	17,381	2,867
1966	28,014	6,303	21,711	19,122	2,589
1967	31,360	7,055	24,305	21,405	2,900
1968	35,955	8,090	27,865	23,910	3,955

Source: Banca D'Italia, Bollettino N.2 (Febbraio-Marzo), 1951-1969.

TABLE 20 (Continued)

BANK DEPOSITS, REQUIRED RESERVES, FUNDS AVAILABLE, AND FUNDS USED
 IN THE SOUTH, AT YEAR END, 1950-1968:
 (In Million of Dollars, at 1963 Prices)

Year	(1) Deposits	(2) Legal Reserve Requirements	(3)=(1)-(2) Funds Available for Use	(4) Funds Actually Used	(5)=(3)-(4) Excess of Funds Available over Uses
1950	744	186	558	585	- 27
1951	874	219	655	671	- 16
1952	1,039	260	779	818	- 39
1953	1,215	304	911	986	- 75
1954	1,344	336	1,008	1,137	-129
1955	1,477	369	1,108	1,235	-127
1956	1,565	391	1,174	1,318	-144
1957	1,761	440	1,321	1,413	- 92
1958	2,293	573	1,720	1,474	246
1959	2,431	608	1,823	1,734	89
1960	2,572	643	1,929	2,054	-125
1961	3,174	794	2,380	2,367	13
1962	3,563	802	2,761	2,691	70
1963	3,794	854	2,940	2,901	39
1964	3,926	883	3,043	2,875	168
1965	3,262	734	2,528	3,004	-476
1966	4,865	1,095	3,770	3,603	167
1967	5,449	1,226	4,223	3,888	335
1968	6,524	1,468	5,056	4,532	524

Source: Banca D'Italia, Bollettino N.2 (Febbraio-Marzo), 1951-1969.

two successive figures gives the amount deposited in banks during the year. In 1968, the total of all kinds of deposits in all banks in the South was only 18% of those in Northern banks.¹ Columns (2) in Table 20 show the amount which banks in the North and South must keep in the form of reserves. These L.R.R. were 25% for all kinds of bank deposits (demand deposits, time deposits, and saving deposits) from 1947 to 1961, and 22.5% from 1962 to the present.²

¹All banks are insured, and national banks have branches in the North and the South; therefore, there is no reason for Southerners to send their deposits to the North. Deposits in banks of national importance are recorded in the province and region in which they are made. So that the deposits in the South refer almost without exception to deposits that arose in the South, while those recorded for the North arose in the North only.

²Banca D'Italia, Relazione for 1962, p. 358, and Banca D'Italia, Bollettino N.1 (Gennaio-Febbraio 1970), p. 6. The reason for the infrequent changes (only one from 1950 to 1970) in the legal reserve requirements is that this is an extremely powerful weapon, and the Central Bank of Italy has been even more reluctant to use it than the Fed, relying instead on Open Market Operation and Changes in the Rediscount Rate for the conduct of its monetary policy. If it is then inquired as to the reason for these relatively high L.R.R. in a country such as Italy which has faced until recently massive open and disguised unemployment (especially in the South), the answer is to be found in the fact that monetary policy in Italy has been very conservative--much more than in the other industrial countries--for fear of inflation but especially because the monetary authorities were convinced all along (and to a great extent, justifiably so) that the Italian situation did not represent a typical Keynesian situation, marked by the coexistence of unutilized productive capacity and unemployed labor, but rather a case of structural disequilibrium and bottlenecks, so that had they conducted an easier monetary policy, inflationary pressures (already high) would have gotten out of hand, rather than have resulted in a greater utilization of the available labor force. See Lutz, Italy--A Study . . ., pp. 297-309.

Columns (3) give the bank funds available for use in both the North and the South. They were obtained by subtracting the reserves which banks were legally required to maintain from the total of bank deposits (column 1 minus column 2). Columns (4) refer to the uses (loans and investments) which Southern banks and national banks make of their deposits within the South. These uses include loans made to Southern businesses and individuals; investments include the purchase of government bonds (mostly of Southern municipalities) and other real investments in the South. Whatever loans or other investments made by Southern branches of national banks in the North are not included in the Southern figures, but would be included in the figures of column (4) for the North.¹ On the other hand, the figures for the South include loans and investments made in the South by Northern branches of national banks.² Columns (5) show the excess of the amount of funds available for use over the amount of funds

¹ Only Southern branches of national banks can use their funds to make loans or invest them in the North. Other Southern banks are not allowed to do so; in addition, strictly Southern banks are forbidden by law to lend to Southern branches of national banks and thus circumvent the law prohibiting strictly Southern banks from using their funds in the North. These exclusively Southern banks control more than half of the total deposits of the South. Giordano Dell'Amore, "Gli Squilibri Territoriali fra Investimenti e Risparmi," Rivista Internazionale di Scienze Economiche e Commerciali, Ottobre 1956, p. 932.

² Data on the actual interregional flows of funds do not exist, so that the direction and size of these flows (to the extent that they actually occurred) must (and can) be inferred from Table 20.

actually used in the North and the South, during each year.

Table 20 shows that no outflow of funds from the South to the North could possibly have taken place through the banking system, in 18 out of the 19 years considered. The reason for this is as follows. During 10 years (1950-1957, 1960, and 1965) of the 1950-1968 period, the amount of bank funds actually used within the South exceeded the sum of the bank funds available for use in the South. The difference must have come either from Northern branches of national banks (a North-South flow of bank funds), or from Southern banks having reserves below their legal level and borrowing from the Central Bank (or from both sources). One thing is certain: during these 10 years there could not possibly have been an outflow of bank funds from the South to the North; indeed, a North-South flow of funds is likely to have occurred.¹ During eight of the remaining nine years

¹It is impossible, because of lack of more detailed data, to establish with precision the amount of capital flow from North to South, through the banking system, during these years. But it is likely that some did take place, particularly during those 6 years (1951-1955 and 1965), when the South had negative values and the North positive values in column (5). The upper limit to this capital flow is about 800 million dollars (see Table 20). Since more than half of the number of banks (of all kinds) operating in the South were strictly Southern banks and since they controlled more than one-half of all the deposits arising in the South, it is possible that as much as one-half of the excess of bank funds used over bank funds available occurred in these banks and had to be borrowed from the Central Bank, and only one-half represented an inflow of Northern banking funds to the Southern branches of national banks. The possible inflow of Northern funds into the South through the banking system must then have been about 400-500 million dollars--certainly less than 800 million dollars.

(1958-1959, 1961-1962, 1964, and 1966-1968), the amount of bank funds available for use in the South exceeded the bank funds actually used within the South. This excess may have taken either the form of excess reserves in Southern banks or may have been invested in the North by Southern branches of national banks in preference to the using of these funds in the South. However, the latter possibility (which would have been harmful to the South) must be excluded since in the eight years considered, Northern banks also had an excess of funds available over uses and this excess was much larger than in the South.¹ Evidently, this excess of bank funds available over bank funds actually used must have represented excess bank reserves in both the South and the North. Only in 1963 could a South-North flow of bank funds have taken place. During that year, the amount of bank funds actually used in the North exceeded the bank funds available in the North, while the opposite was true for the South. However, the excess of bank funds available over

¹Both absolutely (in each of the eight years considered) and proportionately (in five out of the eight years under discussion).

It could be argued that the excess of bank funds available over uses in the North might have resulted precisely from a South-North flow of bank funds. But this is clearly impossible, for why should idle bank funds in the South flow to the North only to increase the idle bank funds already existing in the North?

uses in the South was only 39 million, and part of this may have occurred in strictly Southern banks which could not invest in the North. Thus the South-North flow of bank funds that may have taken place during that year was very small indeed. The bulk of the excess of uses of bank funds over their availability in the North, in 1963, must have taken almost entirely the form of Northern banks having reserves below their legal level and borrowing from the Bank of Italy.

It can thus be concluded that from 1950 to 1968 there is likely to have been a net North-South flow of bank funds. To the extent that this actually occurred, it must have taken place during those years when the North had an excess of bank funds available over uses, while the South had an excess of uses of bank funds over funds available. An upper limit to this North-South flow of bank funds is about 800 million; the actual flow is likely to have been lower--perhaps around 400-500 million dollars--since, as it was seen, there were two ways by which funds used could exceed funds available within the South: one was for a North-South flow of bank funds, the other was for Southern banks to have reserves

below their legal level, and it is likely that both occurred. More precise figures cannot be obtained with existing data. But, what has been established with certainty is that there was no net South-North flow of bank funds from 1950 to 1968.¹

The conclusion reached by this author is confirmed, for the year 1959, by an excellent study conducted by two

¹The only reason there was an excess of investment funds during many years, particularly during the latter part of the period considered, both in the South and in the North, was because the market rate of interest was not allowed to be determined by demand and supply conditions alone, but was set at a higher rate by the monetary authorities in the course of their conservative monetary policy. As was said previously, inflation was the great fear throughout most of the period (the general price index in Italy rose by more than 85% from 1951 to 1968, or by about 5% per year, on the average, and this includes the six years of recession when prices rose by much less). Since the monetary authorities set the interest rate structure on the basis of national and not regional considerations, a question we might ask is, could the South, if it were not associated with the North (i.e., if it were an independent nation) have conducted an easier monetary policy tailored to its own specific regional needs so as to achieve a fuller utilization of its labor and of the funds which it generated? The answer to this question is probably, yes. However, it must be remembered that the South received many benefits by being part of Italy: a capital inflow from the North during 10 of the 18 years considered, an inflow of labor highly specialized in skills which the South never produced, and above all, 25 billion dollars of aid from the North from 1951 to 1968 (see Chapter VII).

So whether the South was a net beneficiary or a net loser by being part of Italy, when the alternative of the South being an independent nation is explicitly considered, is an important question and could be the basis for a very interesting but different dissertation. However, I am here operating within a regional framework and not an international one and many of the rigidities met in the empirical work (here and elsewhere) are inherent to the nature of the problem to which I have addressed myself. This may not be the most interesting problem, but it is certainly the most realistic--since unification, the South never had the choice of being part of Italy or of becoming independent.

staff members of the Banca D'Italia,¹ who measured directly all the financial transactions that took place between the banks of the North and those of the South, during the year 1959. The authors found that in 1959, about 350 million dollars (at 1963 prices) of financial resources (excess of value of checks paid to Northerners by Southerners, net outflow of currency from South to North, etc.) were transferred from the South to the North, and this corresponded almost exactly to the value of the import surplus which the South had vis-à-vis the North, in that year (see Table 27 in Chapter V). Thus they concluded that "the net private outflows of liquid funds from the South to the North represent very likely not investment funds which the poor area sends to the more advanced area, but the payment for the net import position of the South with respect to the North" ² Of course, this is valid only for the year 1959, but by looking at Table 20 we find that 1959 is typical of the 8 years during which excess reserves existed in both the North and the South, but were relatively higher in the North; thus it is almost certain that no investment funds raised in the South were sent to the North during the other seven years either. Hence, contrary to the assertions of the "Meridionalisti," Myrdal, and Hirschman, it can

¹A. Occhiuto and M. Sarcinelli, "Flussi Monetari tra Nord e Sud," Bollettino N.5 (Roma: Banca D'Italia, 1962), 559-86.

²Ibid., 586, 578.

be said, with a high degree of confidence, that the South was not hurt but was probably benefited (from this source) by being part of a nation which included a more developed area (the North).

The following table shows the actual size (in millions of dollars, at 1963 prices) of the bank savings (time and saving deposits only) and postal savings of the South, during each year, from 1951 to 1968. From Table 21 it can be seen that postal savings represent about 30% of the total of bank and postal savings of the South. This latter total is about 5% or less of the N.N.P. of the South, year in and year out.¹ In Italy, the Central Government runs the postal system and the entire amount (2.3 billion dollars) of the postal savings generated in the South, from 1951 to 1968, was used by the Central Government to cover part of the deficits in its budget that it incurred during the period.² The postal savings generated in the South represent about 34-35% of the postal savings of Italy as a whole.³ Since more than 32% of the expenditures of the Central Government from 1951 to 1968 took place in the South,⁴ on the assumption that the budget deficits occurred in equal proportion

¹ISTAT, I Conti Economici Territoriali . . ., pp. 14, 29.

²Giordano dell'Amore, "Gli Squilibri Territoriali . . .," pp. 933-34; and Occhiuto and Sarcinelli, "Flussi Monetari . . .," p. 577.

³Same sources as for Table 20.

⁴See Chapter VII.

TABLE 21
 BANK AND POSTAL SAVINGS, IN THE SOUTH, 1951-1968:
 (Millions of Dollars; 1963 Prices)

Year	Bank Savings	Postal Savings	Total Bank and Postal Savings
1951	87	70	157
1952	115	104	219
1953	151	110	261
1954	130	76	206
1955	127	57	184
1956	121	52	173
1957	186	72	258
1958	295	93	388
1959	251	115	366
1960	300	118	418
1961	319	137	556
1962	426	183	609
1963	341	146	487
1964	234	175	409
1965	408	182	590
1966	457	197	654
1967	433	185	618
1968	526	203	729
Total	4,907	2,275	7,182

Sources: For 1951-1960, SVIMEZ, Fenomeni Economici Caratteristici..., p. 18.
 For 1961-1968, G. Tagliacarne, "I Conti Provinciali," 1961-1968, Chapter IV.

to government expenditures in the North and the South, no allegation could be made that the South financed government budget deficits which occurred in the North. In fact, as will be seen clearly in Chapter VII, the government collected a much smaller percentage of its total revenue in the South than the percentage of its total ordinary (that is, excluding the extraordinary effort to develop the South) outlays that it spent in the South. This, together with the large development aid which it gave to the South continuously from 1950 on, makes it almost certain that most of its budget deficits arose in its dealings with the South rather than with the North. Thus it can be safely concluded that no outflow of the postal savings generated in the South were channelled (through the government treasury) to the North.

An outflow to the North of the savings generated in the South could also have taken place by the purchase of life insurance by Southerners from Northern companies. But this form of saving was almost completely unknown in Italy, and particularly in the South, until the mid-1960's. Since then, it has increased rapidly but still represents a negligible amount (less than 5%) of the total of the bank and postal savings of the South.¹ Less than 150 million dollars was then involved, and not all insurance companies were Northern.

¹G. Tagliacarne, "I Conti Provinciali," 1966-1968, pp. 444, 80, 92, respectively.

A potentially more important channel through which Southern savings could have been transferred to the North was through direct investments (purchase of stocks issued by Northern firms, direct entrepreneurial investments, etc.) of Southerners in the North. In Italy, the stock exchanges are all located in the North, and stock ownership--very little widespread in the North--is almost non-existent in the South.¹ The spread of stock ownership in Italy has been greatly hampered by their uncertain and depressed state in recent years.² In the study published in the Bollettino of the Banca d'Italia, mentioned earlier, the authors state: ". . . The direct investments of the residents of the South in the North, are without doubt, barely visible," and "Data on this matter are not available any place, but it is to be presumed that the direct investments of Northern firms . . . taking advantage of the special incentives to invest in the South, were greater than the extremely small investments that Southerners made in the North plus the outflow of interest and profits on previous Northern investment in the South," and "It is common knowledge in Italy that government bonds have a tendency not to flow out of the area in which they are issued."³ As the authors clearly state, there does

¹"Stocks Popular in Britain but not in Italy," New York Times, Jan. 13, 1969, pp. 38 and 41.

²Ibid.

³Occhiuto and Sarcinelli, "Flussi Monetari . . .," p. 577. The underlining is mine.

not exist any data on stock ownership in the North and the South, and all too often intuition leads to the wrong conclusion, but the intuition of two experts of the Banca d'Italia, using the full research facilities of the Central Bank and publishing the results in its official publication, is unlikely to be wrong, particularly since we know that only after a fairly high level of development is reached does stock ownership become widespread. One thing is certain: the purchase of stocks of Northern companies by residents of the South, to the extent that it did take place, must have been negligible in relation to the size of the quantities I am dealing with.

There could also have been an outflow of savings from the South by the purchase of real estate by Southerners in the North. But with many large cities in the South expanding as fast as Northern cities, and with rents and property values in large Southern cities rising as fast or faster than in the North,¹ there were plenty of opportunities for investments in real estate within the South;² also, this type of investment in the South usually takes place in the same city or in the city closest to the residence of the investor, so that very little of the savings of the South must have flowed to the North from this source.³

¹New York Times, Jan. 22, 25, 1969, pp. 11 and 15, respectively.

²In addition, if this type of outflow of Southern funds had occurred, it would have taken place by bank checks.

³Frankly, precise data on this and also on some of the aspects discussed previously, I doubt exist for any nation--even the United States.

Finally, some of the savings that arose in the South could have been taken out by those who emigrated to the North. That this must have taken place is certain, but it is likely that the value involved was very small. First of all, most of the emigrants were unemployed and very likely had no savings whatsoever, besides enough money to take them to the North and some cash to subsist on, once in the North, before finding employment. If we allow 100 dollars per emigrant (\$50 for transportation and \$50 for subsistence), the total outflow of capital over the entire period (with about two million emigrants) would have been 200 million dollars. Small as this figure is in comparison to the magnitudes I am dealing with--it must represent a gross overestimate. First of all, many emigrants must have borrowed from friends and relatives who had already emigrated to the North to raise the money to emigrate (which they then paid back after finding employment in the North). Secondly, the pattern of emigration was for the head of the family to emigrate first, who then sent part of what he earned in the North to pay for the transportation of the rest of his family.¹ Thirdly, many emigrants, upon arriving in the North, went to live with relatives or friends who emigrated previously, so that many must have emigrated without any cash besides that with which to pay for their train ticket.

¹This may have involved a delay of only a few months, so that it was not picked up in the yearly data on emigration.

Thus we have considered the following as possible channels for the outflow to the North of savings raised in the South: bank deposits, postal savings, purchase of life insurance, purchase of stocks, purchase of real estate, and the outflow of cash. The main conclusion that can be reached is that for those years during which the South had an excess of bank fund uses over bank funds available while the opposite was true for the North (1951-1955, 1965), the inflow of bank funds into the South from the North was probably larger than the combined outflow of funds available from the South from all other sources. For those other years when excess reserves existed in the banking systems of the South and the North, whatever the outflow of Southern savings to the North from all sources outside the banking system, no shortage of investment funds resulted in the South. The expected net outflow of part of the savings of the South to the North did not occur during certain years; during the other years, if it did occur, it was not harmful to the South. For the entire period under consideration (1951-1968), the net flow of savings from all sources was very likely in a North-South direction (about 400-500 million dollars in a North-South direction within the banking system;¹ and 200-300--certainly less than 400 million dollars--in a South-North direction from all other sources outside the banking system). In short, the outflow of savings

¹Part of this total may have come from other nations.

was not a possible avenue through which the South was hurt because of its association with the more developed North.

The Inflow of Northern Direct
Investments to the South

The only possible reason for Northern direct private investments to flow to the South would arise (even in the absence of a shortage of investment funds in the South) if there existed investment opportunities within the South the profitability of which either was not seen by the residents of the South, or because Southerners were not willing to shoulder the risks involved, or because they did not have the know-how to do so. The cases that fit into this category are primarily, or almost exclusively, those that deal with the development or exploitation of natural resources. Since it is widely conceded even by the stoutest "Meridionalisti" that the South has practically no natural resource (petroleum, other minerals, wood, good agricultural land, etc.) in need of development, an insignificant amount (if any) of investment funds must have flowed from the North to the South for this purpose.¹

To be sure, there is some Northern private capital flowing into directly productive uses in the South, but this results entirely from the special incentives provided by the Central Government to outside entrepreneurs who invest in

¹This conclusion was also reached by the authors of the often-mentioned study published in the Bollettino of the Banca d'Italia, p. 578.

the South. Such investments are then more in the nature of government aid to the South than in the way of spontaneous private investments in the South due to advance in the North and, as a result, will more appropriately be included among the measures undertaken by the government to promote the development of the South (than as a factor resulting from the operation of unhampered market forces). The same must be said of the investments made in the South by I.R.I. (Industrial Reconstruction Institute), E.N.I. (National Hydrocarburates Corporation), and other paragovernmental agencies, which are required by law to make a large fraction of their total net investments in the South. Before such a law was passed, in 1957, these agencies made practically all of their new investments in the North and the same would probably be true today without such a law.¹

Inflow of Emigrants' Remittances to the South

There is no data on the remittances to the South from its permanent and temporary emigrants to the North and on

¹The incentives provided by the government to attract Northern and foreign direct investments to the South, the volume of the resulting investments, the percentage and volume of new investments of paragovernmental agencies in the South--these aspects (and many others) of the government strategy to develop the South will all be considered in detail in Chapter VII. Inflationary pressures in the South were kept under control by the fact that most of the capital goods, raw material, and even most of the additional consumption goods that resulted from these investments came from outside the South--from the North and from other nations (and paid by foreign exchange generated exclusively in the North, since the South had a deficit).

the savings which temporary emigrants bring back with them to the South. Rough estimates can, however, be inferred from the wealth of data that exists on remittances to the South from its permanent and temporary emigrants to other nations. The remittances from the North to the South will be estimated from and expressed as a percentage of the remittances from abroad.¹ The discussion that immediately follows attempts to estimate the appropriate percentages to be used. The results are then presented in Table 22.

The remittances of permanent emigrants will be considered first and then those of temporary emigrants. From 1951 to 1968, 1,400,000 people emigrated permanently from the South to other nations.² Of these, 70% or 980,000 were workers.³ This figure is 13% higher than the number of workers emigrating from the South to the North (865,000).⁴ Thus, taking the remittances from permanent emigrants to other nations as 100, 13% must be deducted on the assumption that the average worker who emigrated permanently to the North sent back the same amount of money as the average worker who went abroad permanently. This leaves us with a

¹The meaning of this statement will become clearer in a moment.

²For the years 1951-1966, see SVIMEZ, "Le Migrazioni Interne . . .," 10; for 1967 and 1968, see ISTAT, Popolazione e Movimento Anagrafico dei Comuni (Roma: ISTAT, 1968 and 1969), 24-25 (in both volumes).

³CENSIS, Rapporto sulla Situazione Sociale del Paese Vol. I (Roma: CENSIS, 1969), 17.

⁴See Table 11 in Chapter III.

factor of index number of 87. But of the total national remittances from Italian workers (not just Southern workers) who emigrated permanently to other nations, 35% is accounted for by permanent emigrants from the North.¹ This leaves us with a factor of 57 (65% of 87). But permanent Southern emigrants to foreign nations earn more than those who emigrate permanently to the North and thus can be expected to send more back home. Of the total number of permanently emigrated workers to other nations, about one-half went to Europe (Switzerland, France, Germany, Benelux countries, and England) where per capita incomes are about 30% higher than in the North. The other half went to the Americas and Australia. Of the total who went to the Americas and Australia, one-quarter went to the United States, Canada and Australia, where per capita incomes are about 3 times higher than in the North, and the remaining three-quarters went to Latin America where real per capita incomes are about 60% those of the North.² This makes the earnings of all permanent Southern emigrants to foreign nations some 25% higher, on the average, than those to the North.³ Although the

¹Banca d'Italia, Relazione Annuale 1968, Appendice (Roma: Banca d'Italia, 1969), p. 52; and data on receipts of international checks by regions, for the years 1963 to 1968, kindly provided to the author by Dr. G. Bignami, the director of the III division of La Direzione Centrale Vaglia e Portafoglio, Ministero delle Poste e Telegrafi, in Rome.

²Ministero degli Affari Esteri, Problemi del Lavoro Italiano all'Estero, Relazione per il 1968 (Roma: Direzione Generale dell'Immigrazione e degli Affari Sociali, 1969), pp. 149-52.

³The figure of 25% was obtained by finding a weighted

average worker who emigrates permanently to the North earns 75% as much as the average worker who emigrates permanently to other nations¹ and could thus be expected to send back to the South 75% as much as the average worker who emigrated abroad, as a conservative estimate a figure of 70% is taken. This leaves us with a factor (index of remittances) of 40 (70% of 57). Finally, a smaller percentage of foreign emigrating workers bring their family with them than workers emigrating to the North (30% and 54%, respectively) and can thus, for that reason, be expected to send more back to the South (to support their families)--say 30% more.² Our index

average. Thus taking the per capita income of the North as \$1,000, we get:

$$50\% (\$1,300) + 12.5\% (\$3,000) + 37.5\% (\$600) = \\ \$650 + \$375 + \$225 = \$1,250.$$

¹The implicit assumption made here is that the average per capita income in the area of immigration is a fairly close indicator of how much a Southern emigrating worker would earn after emigrating. However, Southern emigrating workers are less skilled than the average worker in the area of immigration (except for those emigrating to Latin America) and less skilled, on the average, than Southern workers emigrating to the North of Italy. As a result the average worker emigrating to the North might earn more than 75% of those emigrating abroad. However, this factor is partially or wholly neutralized by the fact that earning differentials for different skills are higher in the North of Italy than in the other more developed nations (U.S., Switzerland, Germany, etc.) where Southern workers emigrate. For example, a construction worker emigrating to the U.S. might earn \$500/mo. as opposed to an American electronic technician's earning of \$800/mo. On the other hand, a Southern machine operator (slightly more skilled than a construction worker) emigrating to the North might earn \$150/mo. as opposed to \$300/mo. for a Northern electronic technician.

²For each 100 workers who emigrated from the South to other nations permanently, only 30 brought their families with them. If we assume that those workers who emigrated alone sent \$100 back to the South, while those workers who

has now fallen to 28 (70% of 40). As a conservative figure, the remittances from permanent Southern emigrating workers to the North will be taken to be 25% of the total remittances from the permanent Southern emigrants abroad.

The number of Southern temporary emigrating workers (those who emigrate for one or two years only) to the North exceed those who emigrate to other nations for the years for which data exist (1960-1968).¹ Those workers who move

emigrated with their families sent back only \$20 (to relatives: grandparents, uncles, cousins, etc., still remaining in the South), an index of remittances of permanent emigrants from the South to other nations could be found by a weighted average: $(\$100) (70 \text{ workers}) + (\$20) (30 \text{ workers}) = 76$. If we do the same for the Southern workers who emigrate permanently to the North we get an index of 57: $(\$100) (46 \text{ workers}) + (\$20) (54 \text{ workers}) = 57$. And the index of 76 is about 30% higher than the index of 57. To be sure, the figures used are somewhat arbitrary. They are included here simply to give some idea of how the figure of 30% (in the text) was arrived at.

¹For data on temporary emigration from the South to the North and to other nations for the years 1964-1966, see ISTAT, Annuario di Statistiche Demografiche, 1964-1966, pp. 350, 358-59 in each volume. For other years, see ISTAT, Rilevazione Nazionale delle Forze di Lavoro (Roma: ISTAT, 11 Ottobre 1968), pp. 50-52; for data on temporary internal migration, see SVIMEZ, "Le Migrazioni Interne . . .", 12, and Ministero del Lavoro e delle Providence Sociali, Statistiche del Lavoro (Roma, 1960-1968), Appendice; also, Lutz, Italy - A Study . . ., p. 125. To be pointed out is that in Chapter III only the flow of permanent emigrants from the South to the North was considered. Temporary emigration was not considered because each year the flow of workers temporarily emigrating from the South to the North exactly matches the inflow during the year. In fact, it is from the difference of the number of all workers emigrating during one year and those returning during the same year that the number of workers who emigrated permanently was obtained. (There were some workers who emigrating temporarily to the North never bothered to change their legal residence to the North. If they then chose to remain permanently they usually did). And workers who emigrated temporarily might have acquired some useful skills in the North--though an inquiry

abroad go almost exclusively to other nations of the European Economic Community, England and Switzerland. Whether to the North or abroad, these workers move mostly alone. Starting from an index for remittances of 100, the only adjustments that need to be made here are to reduce by 30% that index since 30% of these temporary emigrants come from the North, and by 50% since about one-half of Southern temporary emigrating workers go to Switzerland (as opposed to relatively few of the permanent emigrants) where per capita incomes are about 75% higher than in the North, while the other half to other nations which have per capita incomes about 25% higher than in the North. Thus we are left with an index of 35 ($100 \cdot 70\% = 70$; $70 \cdot 50\% = 35$).¹ As a conservative estimate, the remittances of temporary emigrating workers from the South to the North plus the savings brought back with them will be taken to be one-third of those from abroad. The end result is shown in Table 22. All figures are expressed in millions of dollars at 1963 prices. Column (1) indicates the foreign remittances from those workers who emigrated from Italy permanently. Column (2) is obtained by dividing the corresponding figures of Column (1) by (4) and represents an estimate of the remittances to the South from its workers permanently

into returning foreign workers showed that they had acquired few, if any, skills while working abroad: CENSIS, Rapporto sulla Situazione Sociale del Paese, I (Roma: CENSIS, 1969), 19-20.

¹Same source and pages as those of footnote 1 on p. 175.

emigrated to the North. Column (3) gives the remittances sent back and the savings brought back with them by workers who emigrated temporarily from Italy to other nations. Column (4) is gotten by dividing the figures of Column (3) by $1/3$ and gives us an estimate of the remittances and of the savings brought back by those Southern workers who temporarily emigrated and found jobs in the North. Column (5) is the addition of columns (2) and (4) and represents an estimate of the remittances of Southern workers who emigrated permanently and temporarily to the North. Column (6) expresses the overall figures of Column (5) on a per capita basis, and Column (7) as a percentage of the yearly real per capita output of the South.

The table shows that over the 19-year period considered, about 2.5 billion dollars (in 1963 prices) were sent back to the South by Southern workers who emigrated and found jobs in the North. As expected, the remittances and the savings brought back by workers who temporarily emigrated exceed the remittances of those workers who emigrate permanently. In the table they are 60% and 40% of the total remittances, respectively. If anything, the estimates presented in Table 22 are on the conservative side. First of all, the index of remittances was intentionally constructed to be on the low side. Secondly, as discussed in Chapter III, workers emigrating internally were in general more skilled than those emigrating abroad. Third, according to official estimates, as much as 100 million dollars of remittances,

TABLE 22

ESTIMATES OF THE REMITTANCES TO THE SOUTH, FROM SOUTHERN WORKERS
WHO EMIGRATED TO THE NORTH, 1951-1968:
(In Millions of Dollars at 1963 Prices - Unless Otherwise Specified)

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1951	71	18	60	18	36	2.00	
1952	99	25	80	24	49	2.72	0.82
1953	110	28	89	27	55	3.05	0.89
1954	106	27	76	23	50	2.78	0.76
1955	110	28	74	22	50	2.78	0.75
1956	130	33	115	35	68	3.78	0.97
1957	147	37	162	49	86	4.78	1.16
1958	226	57	186	56	113	6.28	1.48
1959	214	56	199	60	116	6.44	1.47
1960	263	66	226	68	134	7.05	1.57
1961	311	78	256	78	156	8.21	1.68
1962	325	81	327	99	180	9.47	1.90
1963	283	71	355	108	179	9.42	1.75
1964	266	67	377	114	181	9.53	1.76
1965	293	73	442	134	207	10.89	1.90
1966	307	77	479	145	222	11.68	1.98
1967	296	74	426	129	203	10.68	1.69
1968	337	84	437	133	217	11.42	1.80
Total	3,894	980	4,366	1,322	2,502	123.06	

- Legend:
- (1) Remittances to Italy from its Permanent Emigrants.
 - (2) 1/4 of Column 1.
 - (3) Remittances and Savings Brought Back to Italy by its Temporary Emigrants.
 - (4) 1/3 of Column 3.
 - (5) Column 2 plus Column 4. (This is an estimate of the total remittances to the South from Southern workers who emigrated to the North.)
 - (6) Dollars per Capita.
 - (7) (6) as a Percentage of Real per Capita Output.

WHO EMIGRATED TO THE NORTH, 1951-1968:
(In Millions of Dollars at 1963 Prices - Unless Otherwise Specified)

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1951	71	18	60	18	36	2.00	
1952	99	25	80	24	49	2.72	0.82
1953	110	28	89	27	55	3.05	0.89
1954	106	27	76	23	50	2.78	0.76
1955	110	28	74	22	50	2.78	0.75
1956	130	33	115	35	68	3.78	0.97
1957	147	37	162	49	86	4.78	1.16
1958	226	57	186	56	113	6.28	1.48
1959	214	56	199	60	116	6.44	1.47
1960	263	66	226	68	134	7.05	1.57
1961	311	78	256	78	156	8.21	1.68
1962	325	81	327	99	180	9.47	1.90
1963	283	71	355	108	179	9.42	1.75
1964	266	67	377	114	181	9.53	1.76
1965	293	73	442	134	207	10.89	1.90
1966	307	77	479	145	222	11.68	1.98
1967	296	74	426	129	203	10.68	1.69
1968	337	84	437	133	217	11.42	1.80
Total	3,894	980	4,366	1,322	2,502	123.06	

- Legend:
- (1) Remittances to Italy from its Permanent Emigrants.
 - (2) 1/4 of Column 1.
 - (3) Remittances and Savings Brought Back to Italy by its Temporary Emigrants.
 - (4) 1/3 of Column 3.
 - (5) Column 2 plus Column 4. (This is an estimate of the total remittances to the South from Southern workers who emigrated to the North.)
 - (6) Dollars per Capita.
 - (7) (6) as a Percentage of Real per Capita Output.

Source: Ministero degli Affari Esteri, Problemi del Lavoro Italiano all'Estero, Relazione (Roma: 1968), Appendix III, Table I.

per year, in the late 1950's, entered Italy through channels other than the official ones--mostly savings which workers who emigrated temporarily brought back with them upon returning to Italy.¹ Because of all of these reasons, the 2.5 billion dollars estimated as the inflow of remittances to the South from its workers emigrated to the North from 1951 to 1968 is certainly an underestimate.

Undoubtedly, a great deal of the remittances were used to increase the consumption level of Southerners who had members of their families working in the North, but a great deal must also have been saved--particularly from the remittances of workers temporarily emigrated to the North. In addition, most of what the latter brought back with them upon returning to the South must have taken the form of savings--a great deal of which bank savings. Thus, the maximum of 900 million which might have flowed from the South and to the North through the banking system may have been more than neutralized by the new bank savings generated from emigrant remittances from the North. Since there was no shortage of capital within the South during most of the period considered, the remittances from the North will be considered only as part of the present, regional, spendable income.² This is the practice followed in Italian statistics for remittances from other nations. These remittances

¹Giorgio Mortara, Economia della Popolazione (Torino: Unione Tipografica - Editrice Torinese, 1960), p. 353; also Italian Affairs, January 1958.

²Remittances were either consumed or saved but the

(from the North) ranged from 2 to 12 dollars, per year, per person resident in the South or from 0.8% to 2.0%, per year, of the real, per capita output of the South, over the period 1951-1968.

Abandonment of Fields and Houses

It is sometimes said that mass emigration gives rise to conditions of widespread abandonment of houses and fields with resulting harmful effects on the development of the poor region from which this mass emigration arises. In this section I will determine if there actually was widespread abandonment of houses and fields in the South as a result of emigration. If this will be found to have occurred, then the economic value of the abandoned houses and fields will be sought so as to determine the size of this Backwash Effect on the South.

As was seen in Chapter III, the emigration from the South to the North, between 1951 and 1968, numbered about 2 million people or more than 10% of the resident population of the South in 1968. Another 2 million persons emigrated from the South to other nations during the same period¹ thus making the total emigration from the South equal to about 4 million people or to more than 20% of the resident

part that was saved did not, in all likelihood, increase the level of productive investments in the South and thus had no multiplier effect on the level of output of the South. They must instead have contributed to the condition of excess reserves that prevailed most of the time in the South.

¹SVIMEZ, "Le Migrazioni Interne . . .," p. 10.

population of the South in 1968. Though interest is here focused on internal migration only, it would be difficult, if not impossible, to discern what part of the houses and fields abandoned was due to the emigration of Southerners to other nations and what part resulted from the South-North migration (and for that matter, from the intra-South migration, e.g., from rural to urban areas). Matters are simplified, however, by the fact that the data available unmistakably show that there have been no houses abandoned, as a result of all forms of migration, except for some houses located in mountainous, inaccessible areas where the opportunity of industrial and agricultural development were nil. Similarly, data show that very little marginal land has been abandoned in the South, thus eliminating the possibility of a Backwash Effect on the South from this source also.

Abandonment of Houses

In the 1951 and 1961 Censuses of Population, data were collected on the number of houses in existence, the number of houses that were occupied (and, therefore, by subtracting the latter from the former--the number of houses that were abandoned) and their location. These data are presented in Table 23. This table shows that the number of abandoned houses in the 31 provincial and regional capitals in the South actually declined from 1951 to 1961. And these were the only areas which had any possibility of agricultural and industrial development since they were mostly located in coastal plains where there was at least some

possibility of irrigation and had a minimum of infra-structures necessary for the setting up of industry.¹ The only increase in the number of houses abandoned took place in other communes of the South. These are almost exclusively internal, mountainous, inaccessible areas without any possibility of agricultural and industrial development.

TABLE 23

ABANDONED HOUSES IN THE SOUTH BY LOCATION, 1951 AND 1961

Year	In Provincial and Regional Capitals	In Other Communes	Total
1951	125,758	132,635	258,393
1961	78,908	322,161	401,069

Source: ISTAT, X^o Censimento Generale della Popolazione, I, 15 Ottobre 1961, pp. 32-37.

It is from these areas that most of the emigration took place. Table 24 shows that most of the increase in the resident populations of the South that occurred from 1951 to 1961 and 1968 took place in these provincial and regional capitals. Since between 1961 and 1968 the population growth of provincial and regional capitals proceeded at a much faster rate (just as in the 1950's) than in other communes, it is reasonable to expect that most or all of the increase that may have taken place in the number of abandoned houses in the South must have occurred, just as in the

¹That these were the only areas where development was at least possible is confirmed by the fact that the development-nuclei chosen by the Cassa fell almost exclusively in these areas. More on this in Chapter VII.

previous period, in those communes where development of any kind could not take place.¹ As a result the abandonment of houses in the South did not entail any economic loss or hindrance to its development: no Backwash Effect was involved.

TABLE 24
POPULATION RESIDENT IN THE SOUTH BY LOCATION,
1951, 1961, 1968
(In Thousands)

Year	In Provincial and Regional Capitals	In Other Communes	Total
1951	3,995	13,790	17,785
1961	4,741	13,834	18,575
1968	5,119	14,224	19,346

Source: For 1951 and 1961: ISTAT, X^o Censimento Generale della Popolazione, I, 15 Ottobre 1961, 12-13.
For 1968: ISTAT, Popolazione e Movimento Anografico dei Comuni (Roma: ISTAT, 1968), 3, 148-204.

Abandonment of Fields

The following table indicates that the total area under cultivation of the South increased by about 145,000 hectares from 1955 to 1966.² Since over the same period of time, approximately 257,000 hectares of marshland were

¹This seems also to be the conclusion of a study conducted by SVIMEZ: Trasformazioni Sociali e Culturali in Italia e Loro Riflessi sulla Scuola (Roma: Giuffre', 1962), pp. 33-35, 42-46.

²Data on earlier years are not comparable; data for years after 1966 have not yet been published.

reclaimed in the South,¹ this means that 112,000 hectares (257,000 minus 145,000) of agricultural land were abandoned in the South from 1955 to 1966. This represents only 1% of the cultivated land of the South. This reduction in the

TABLE 25
AREA UNDER CULTIVATION IN NORTH AND SOUTH, 1955 AND 1966
(In Thousand Hectares)

Year	North	South	Total
1955	11,510	9,398	20,908
1966	10,861	9,543	20,404

Source: ISTAT, Annuario di Statistica Agraria (Roma: ISTAT, 1957 and 1968), pp. 20 and 32, respectively.

cultivated area of the South resulted from the rural-urban migration within the South, from the emigration of Southern farmers to other nations, from the emigration of Southern farmers to the North, and from attrition. Since over 95% of the Southern farmers who emigrated from the South went to other nations and only 5% went to the North,² most of the very small amount of land abandoned in the South must have resulted from the emigration of Southern farmers to other

¹In Chapter VII, data will be presented which shows that from 1951 to 1968, 383,000 hectares of marshland were reclaimed in the South. Since the amount of land reclaimed was approximately the same in each year, this gives us a figure of about 257,000 hectares for the amount of agricultural land reclaimed in the South from 1955 to 1966.

²See Chapter III.

nations. In addition, part of the 112,000 hectares of land abandoned must have been caused by the intra-South rural-urban migration and from the reduction in the Southern agricultural labor force from attrition. Because of all these reasons, the amount of land abandoned in the South from the emigration of Southern farmers to the North is very likely to have been insignificantly small. Finally, Manlio Rossi-Doria, the most renowned agricultural expert on the South and himself a Meridionalista, concluded that the little agricultural land that was abandoned in the South represented entirely marginal land and this, far from being harmful to the South, was a great benefit to it and should continue.¹ Thus the conclusion to be reached here is that little if any agricultural land was abandoned in the South as a result of the emigration of Southern farmers to the North and the little agricultural land that may have been abandoned in the South from the South-North migration of farmers was marginal land. Therefore, this potential Backwash Effect on the South must have been exceedingly small, if not entirely non-existent.

¹Manlio Rossi-Doria, "Il Mezzogiorno Agricolo e il Suo Avvenire," in Nord e Sud (Torino: Fondazione Luigi Einaudi, 1968), pp. 285-99. Professor Rossi-Doria presents data that indicate that the little agricultural land that was abandoned in the South took place exclusively in mountainous areas, was land of the poorest quality, without irrigation and lacking any possibility of rational improvement. He feels that more of this land must be returned to woodland and pastures.

Summary and Conclusions

In section 1, it was seen that over the 1951-1968 period the net flow of savings, from all sources, was very likely in a North-South direction. There were, to be sure, years during which the net saving flow may have been in a South-North direction but these were invariably years when the banking system of the South had excess reserves so that no shortage of investment funds resulted in the South.

In section 2, it was seen that very little, if any, Northern direct private investments flowed into the South (outside those that resulted exclusively from the government incentives to direct investments in the South) because the South had none or very meager natural resources in need of exploitation.

In section 3, it was seen that a conservative estimate of the remittances of Southern labor that emigrated to the North was 2.5 billion dollars from 1951 to 1968. This represented from 2 to 12 dollars per year, per resident of the South, or from 1 to 2% of the real, per capita output of the South.

Finally, in section 4, it was concluded that no Backwash Effect on the South was involved by the abandonment of houses and fields.

Thus, two conclusions emerge from this chapter:

(1) the interregional flow of savings was not harmful to the South; very likely its net effect was beneficial to it.

(2) The remittances sent back to the South by Southern emigrants greatly benefited the South by increasing the regional spendable income.

The net movement of capital, just like the movement of people, was beneficial to the South.

CHAPTER V

THE MOVEMENT OF GOODS

Introduction

In this chapter, the third and last of the broad movements--the movement of goods between the North and the South of Italy--will be analyzed. In the first part of the chapter, the interregional flow of agricultural commodities and raw materials will be examined. In the second part, the interregional flow of manufactured goods will be taken up. In the third part, conclusions will be presented with regard to the net result of the flow of goods between the North and the South, from the point of view of its effect on the development of the South.

The Flow of Agricultural Commodities and Raw Materials

Since the North and the South of Italy form a unified market characterized by the free movement of commodities,¹ it would be unrealistic to expect the existence of systematic and detailed regional trade and payments

¹That is, unhampered by tariffs, quotas, etc. that usually interferes with the free flow of goods among nations.

statistics as currently prepared for nations.¹ As a result, the interregional trade balance in agricultural commodities and raw materials must be inferred, to a great extent, from the indirect evidence provided by available, regional production and consumption data.

The fact that the South is the underdeveloped, poor, and agricultural region of an otherwise developed and industrial nation, leads us to expect that it should export agricultural commodities and raw materials to, and import manufactured goods from the North. The question to which an answer will be sought in this section is if, and to what extent, the production of agricultural commodities and raw materials has expanded (and thus resulted in a Spread Effect) in the South, as a result of the rapid growth of the North. If the data showed that over the period under consideration (1951-1967), the increase in consumption within the South was equal to (or greater than) the increase in Southern production of the same agricultural commodities (that the South exports to the North), then the value of this Spread Effect on the South will be taken to be zero. In this case, there would have been more than enough stimulus within the South itself to increase agricultural production. The South did not reap any benefit from rapid expansion in the North.

¹This is true for all nations, including the United States. Hugh O. Nourse, Regional Economics, pp. 150-51.

This is, indeed, what production and consumption data for the South indicate.¹

Production data will be discussed first, then consumption data will be presented. Aggregate figures will be considered before going into disaggregates. All figures are expressed in dollars, in terms of 1963 prices. Since agricultural production varies considerably from year to year due to weather and cyclical conditions, the yearly average for the 1951-1953 period will be taken as the value of agricultural production in the South at the beginning of the period and that for 1965-1967 for the end of the period. Thus, during the 14-year period considered (1952-1966), the market value of the agricultural output of the South increased from 1,954 million dollars to 2,919 million dollars or by about 39.6%.² On the other hand, the consumption of

¹"Agricultural output or commodity" refers here only to foodstuffs. Agricultural raw materials and minerals will be treated separately--later. However, most of the attention in this section will be given to foodstuffs, since it represents more than 90% of the combined output of foodstuffs, raw materials, and minerals of the South. Also, both the South and the North satisfy most of their additional needs of raw materials and minerals from abroad and the interregional trade in these products is practically nil. Vera Lutz, "Some Structural Aspects of the Southern Problem: The Complementarity of 'Emigration' and Industrialization," Banca Nazionale del Lavoro, Quarterly Review (Dec., 1961), pp. 367-402.

²See Table 28, column (3). The percentage increase in the value of the aggregate agricultural output of the South falls short of the percentage increase in the value of agricultural output per person employed in agriculture (discussed in Chapter VII) which resulted to a large extent because of the mass emigration of surplus agricultural labor from Southern farms.

agricultural commodities within the South rose from 2,638 million dollars in 1952, to 4,470 million dollars in 1966 or by about 51.5%.¹ The above aggregate figures clearly show that the increase in the value of agricultural production within the South did not keep up with the increase in consumption, so that the South, starting from a net import position of about 876 million dollars in 1952, ended up with a net import position of agricultural commodities of 1,705 million dollars, 14 years later.² Thus the South not only could not take advantage of the rapid increase in the demand for agricultural products in the North but was unable to even satisfy the increase in its own consumption needs.³ Using different approaches and much less complete data than now available, Chenery and Lutz reached similar conclusions for the 1951-1959 period: i.e. that the

¹See Table 28, column (2). The large increase in the consumption of agricultural products within the South, in the face of a small, net increase in its population, is explained by the fact that a great deal of the increase in the low per capita incomes of the South was spent on food. Thus in 1951, 57% of the per capita income of the South was spent on food; by 1959, the percentage was still 52%. Lutz, Italy - a Study . . ., p. 142.

²For the other years, see Table 28, column (4).

³The South paid for this large net increase in imports of agricultural commodities (almost entirely from other nations) not by the net export of manufactured goods (of which the South is also a net importer) but by the remittances from its workers emigrated abroad and to the North (which in 1966 amounted to over one billion dollars--see Table 22 in Chapter IV and by the government aid to the South, a great deal of which went to subsidize consumption, and which amounted to 20-25% of the N.N.P. of the South in 1966 (see Chapter VII).

expansion of the agricultural output of the South failed to keep up with the increase in the consumption of agricultural commodities within the South.¹

The aggregate figures just presented might conceal the possibility that most of the increase in the value of agricultural commodities produced within the South might have resulted from the expansion of the demand for these commodities in the North. However, this was not the case. All types of agricultural commodities produced in the South are also consumed in the South. It is true that the South was, and is, a net exporter of fruits and vegetables to, and a net importer of meats and other animal products from the North. However, the quantities involved are small and they have increased by a small amount. Thus from 1952 to 1966, the increase in the value of the output of fruits and vegetables in the South has been 54% but amounted to only 400 million dollars.² If the quantity demanded of fruits and vegetables within the South increased at the same rate as for all agricultural products (51.5%),³ of the 400 million dollars increase, less than 200 was available to be exported, and of this almost 100 million dollars represented

¹Hollis B. Chenery, "Development Policies for Southern Italy," pp. 536-38; Lutz, "Some Structural Aspects . . . ," pp. 376-80.

²Elaborated from: ISTAT, I Conti Economici . . . , p. 40.

³This is indeed likely since fruits and vegetables, just like meats, are high quality foods with a high income elasticity of demand, as opposed to cereals, potatoes, etc.

the increase in Southern exports of fruits and vegetables to other nations--mostly to Switzerland and Germany.¹ This leaves less than 100 million dollar-worth (about 86) for the possible increase of exports of fruits and vegetables from the South to the North. When the increase of the net imports of meats and meat products (especially cheeses, hams, etc.) of the South from the North is considered, little if anything remains for the net increase in the exports of Southern agricultural products to the North made possible by expansion in the North.

This conclusion seems to be confirmed by a special inquiry into the net exports of Southern agricultural products to the North carried by railroad, in the year 1959.² In that year the South's net exports of foodstuffs to the North amounted to only 90 million dollars, while the South's

¹Elaborated from: Enrico Capperdoni, Lo Sviluppo Italiano del Dopoguerra (Padova: Marsilio, 1968), p. 185, and Banca d'Italia, Relazione for the years 1952 and 1966, Balance of Payments Section. The way the elaboration was conducted was to look at the composition of Italian exports of agricultural products to other nations and by knowledge of the climatic conditions necessary to produce some of these products. Since oranges, lemons, tangerines, bananas, tomatoes, olives, etc., cannot be produced at all in the North, all of the increase in Italian exports of these products must have originated in the South.

²ISTAT, "Primi Studi sui Conti Economici Territoriali," Annali di Statistica, Serie VIII, XII (Roma, 1960), 8. Because of the geographical configuration of Italy, almost all South-North cargo (except, of course, those to and from the islands of Sicily and Sardinia) moves by rail, and the net exports of food products (by boat) of Sicily and Sardinia was certainly less than that of all the other six regions together.

net imports of (only) live animals for slaughter from the North was about 20 million dollars. The study also shows that the South is a very small net importer of agricultural raw materials (excluding minerals) from the North.¹ This only leaves minerals to be considered. The South produces a variety of minerals (from very small deposits, however): petroleum, sulphur, potash, bauxite, phosphate and cement.² But the increase in the total value of mineral production in the South from 1952 to 1966 was only 21 million dollars (from 107 to 128 million dollars).³ Even if the entire 21 million dollars worth of the increase in the mineral

¹Both the North and the South have a large and increasing net import position vis-à-vis other nations in foods (particularly meat and meat products), agricultural raw materials, and minerals. In 1958, this amounted to about 50% of the total value of Italian imports. More than 90% of the increase in demand for agricultural raw materials and minerals of the South are imported from other nations and expansion of the North could not and did not stimulate the production of agricultural raw materials in the South since the South lacks the natural resources necessary for this type of production. See "Movimento Economico Interno e Interscambio," Scienze Economiche e Commerciali, July 1963, p. 611. (No author given.) Unfortunately exact data on the production of agricultural raw material in the South does not exist for the entire period under consideration but only for the years 1965, 1966 and 1967. In each of the three years just mentioned the market value of the agricultural raw material produced in the South was less 100 million dollars/year; 86, 85, and 96 million dollars, respectively. Comitato dei Ministri per il Mezzogiorno, Studi Monografici sul Mezzogiorno (Roma: Istituto Poligrafico dello Stato, 1969), p. 14.

²Frederich Vöchting, "Considerations on the Industrialization of the Mezzogiorno," Banca Nazionale del Lavoro, Quarterly Review (September 1958), pp. 325-76.

³ISTAT, I Conti Economici . . . , p. 45.

production of the South had been exported to the North, this would have represented an insignificant amount in comparison to the magnitudes we are dealing with. However, all of the increase in the mineral production of the South was heavily subsidized by the government and part of the government program to develop the South, and thus it was not due to the expansion of demand in the North. In addition, practically all of this small increase in the output of minerals in the South was used in the South.¹

What comes out of all this is the conclusion that the expansion of demand of agricultural products, raw materials, and minerals in the North stimulated the production of these commodities within the South by only about 50 million dollars--certainly less than 100 million dollars--not per year but over the 14-year period considered. All of this expansion in output (due to growth in the North) was in the production of foodstuffs. This represents less than 2% of the production of foodstuffs in the South in 1966, and less than 6% of its increase from 1952 to 1966. But even these figures, extremely small as they are, cannot be taken as the true measure of the Spread Effect in the South.² To do so would imply that those agricultural resources of the South used to increase the value of exports

¹Vöchting, "Considerations on the Industrialization . . . ," pp. 325-76.

²The discussion that follows refers only to agricultural food products.

of fruits and vegetables to the North would have remained idle in the absence of an increased demand for these products in the North. However, it is possible that other common market countries would have absorbed this small increase in the output of fruits and vegetables of the South available for export, since these countries, even more than the North, lack the climatic conditions to produce these products. But even more important than this, is the fact that the agricultural resources released by an hypothetical lack of expansion in the exports of fruits and vegetables to the North could and would very likely have been used to produce more of those commodities of which the South is now a large net importer from abroad (e.g. eggs, chickens, dairy products, meats, etc.). Only to the extent that the use these agricultural resources (to produce increased exports to the North) represented a better use of resources than it would have been to utilize them to produce domestically (in the South) demanded commodities (now imported)-- involves a Spread Effect on the South.

Thus, when we consider how small the net increase of the agricultural exports of the South to the North were (about 50 million dollars), and all the qualifications that were added, only one conclusion can be reached: the South benefited, in this respect, to an insignificant extent from its association with the North. The expansion of demand of agricultural products, raw materials, and minerals in the

North failed to stimulate an increase in the supply of these products in the South so that imports of these commodities from abroad had to increase (see Table 28 and the discussion relating to it).

The stimulus was there, but the South could not and did not respond to it. The Spread Effects on the South from this source were practically non-existent.

The Flow of Manufactured Goods

As expected, the South, being the underdeveloped part of an otherwise developed and industrial nation, was, during the period considered (1951-1968), a net importer of manufactured goods from the North.¹ This might not only have discouraged new manufacturing firms from being set up in the South but might also have driven existing manufacturing firms in the South, out of business. In this section, the latter Backwash Effect will be subjected to empirical measurement; the former, as mentioned earlier, will be discussed (and measured) in Chapter VI.

The size of this Backwash Effect on the South (that is, that due to the failure of manufacturing firms in the South resulting from the net importation of manufactured goods from the North), will be measured by finding, for each year, the number of business failures in manufacturing in

¹The actual figures will be presented in Table 27, column (2).

the North over the total number of these firms in existence in the North. The same would be done for the South. The excess of this ratio for the South with respect to that for the North for each year will be taken as an indication of the presence of this Backwash Effect. The actual size of this Backwash Effect on the South would be found by translating the excess in that ratio for the South (with respect to the corresponding ratio for the North) into an excess number of manufacturing business failures in the South, which, multiplied by the average size of business failures in manufacturing in the South, would give an estimate of the value sought.

In Table 26, columns (1) and (3) give the number of manufacturing firms that failed in the North and in the South for each year, from 1951 to 1968. Columns (2) and (4) indicate the number of manufacturing business failures per year, in the North and in the South, for each 10,000 of such firms in existence in the North and the South, respectively.¹

¹Only for the Census-years of 1951 and 1961, there are figures for the total number of manufacturing firms in the North and South. For the period 1952-1960, the average of the 1951 and 1961 figures was used. For the years after 1961, the 1961 figure was utilized. For 1951, see: ISTAT, III Censimento Generale dell'Industria e del Commercio, 5 Novembre 1951, Dati Generali Riassuntivi, Vol. XVII (Roma: Istituto Poligrafico dello Stato, 1957), p. 16. For 1961, ISTAT, IV Censimento Generale dell'Industria e del Commercio, 16 Ottobre 1961, Dati Generali Riassuntivi, Vol. VII (Roma: Istituto Poligrafico dello Stato, 1968), pp. 75-88.

The actual number of manufacturing firms in the North increased by 1.8% (from 403,981 to 411,414) between 1951 and

TABLE 26

NUMBER OF BUSINESS FAILURES IN MANUFACTURING IN NORTH AND SOUTH, 1951-1968

Year	(1) Number of Manu- facturing Firms that Failed in the North	(2) Number of Failures per 10,000 Manu- facturing Firms in the North	(3) Number of Manu- facturing Firms that Failed in the South	(4) Number of Failures per 10,000 Manu- facturing Firms in the South
1951	--	(--)	--	(--)
1952	--	(--)	--	(--)
1953	932	(23)	203	(11)
1954	1,019	(25)	224	(12)
1955	1,243	(30)	295	(16)
1956	1,169	(29)	321	(18)
1957	1,179	(29)	307	(17)
1958	1,248	(31)	324	(18)
1959	1,203	(30)	267	(14)
1960	1,037	(25)	265	(14)
1961	1,021	25	311	18
1962	1,075	(26)	278	(16)
1963	1,120	(27)	217	(12)
1964	1,329	(32)	285	(16)
1965	1,567	(38)	244	(14)
1966	1,438	(35)	261	(15)

Source: For Columns (1) and (3): ISTAT, Annuario di Statistiche Giudiziarie, 1951-68.

For Columns (2) and (4): See text.

From columns (2) and (4), it can be seen that the ratio of the number of manufacturing firms going out of business, for each 10,000 of such firms in existence, was higher--much higher--in the North than in the South for each year, from 1953 to 1966.¹ Looking at these figures, and on the assumption that a proper testing procedure was used,² the tentative conclusion can be reached that there seems to be little or no indication that manufacturing firms in the South went out of business, during the period

1961, while in the South it declined by 2.9% (from 182,845 to 177,517). Because of these small percentage changes in the number of manufacturing firms in the North and the South between 1951 and 1961, I felt that it was unnecessary to use the compound interest formula to get a more accurate estimate of the number of manufacturing firms in the North and in the South for every year between 1951 and 1961; so that the average of the 1951 and 1961 figure was used for the years 1952 to 1960.

The reason for the decline in the actual number of manufacturing firms in the South from 1951 to 1961 was not due to the fact that the rate of failure was greater in the South than in the North (indeed, this rate was much higher for the North) but rather because the existence of already efficient manufacturing firms in the North discouraged the setting up of new firms in the South (this question will be explored fully in the next chapter).

¹If the number of manufacturing firms in existence in the North and the South in 1961 had been used for the entire 1953-1966 period to find the ratios of columns (2) and (4), those ratios would have been only slightly different: for the North these ratios would have been different only for the years 1956, 1958 and 1959 (28, 30, 29 rather than 29, 31, 30--respectively); for the South the ratios would have been different only for the years 1954, 1955, 1959, 1960 (13, 17, 15, 15 rather than 12, 16, 14, 14). Thus the conclusion reached in the text would not be changed: the ratios would remain much higher for the North (column 2) than the ratios for the South (column 4).

²This assumption will be critically evaluated in a moment.

under consideration, as a result of the importation of manufactured goods from the North. However, before we accept this tentative conclusion at face value and with confidence a very important and crucial point must be considered: the result obtained may have been due to the fact that an improper testing procedure was used. This is always a possibility which must be allowed for in any empirical work. In the above test, the implicit assumption was made that the ratio of the number of business failures in manufacturing to the total number of firms in manufacturing would be approximately the same in both the North and the South, in the absence of the observed North-South net flow of manufactured goods. However, there might be several reasons that could cause this ratio to be different in the North from that in the South (e.g. different stages of development, different vulnerability to business cycles due to a different industrial mix, different attitudes toward risk, differential effect of international trade, etc.). This shortcoming of the above testing procedure is acknowledged; nevertheless, it should not be exaggerated. For example, there are several empirical studies that seem to indicate that Southern entrepreneurs in industrial zones of the South are not more conservative than their Northern counterparts. Indeed, in some industrial areas such as that of Latina, Pescara, and Siracusa they seem to be less

conservative than Northern entrepreneurs.¹ It must also be realized that Northern entrepreneurs are in general ready to seize what they regard as sufficiently rewarding investment opportunities if they were passed over by more conservative Southern entrepreneurs.² In addition, the data of Table 26 seem to indicate that the North and the South are affected in about the same way (as far as the rate of business failures) by cyclical fluctuations. The increase in the rate of business failures seems to have been relatively higher in the North than in the South in the 1964-66 recession. The reverse was the case in the only other recession (1955-57) that occurred in the period under consideration.³ Thus the higher ratio of business failures in the North cannot be blamed on the fact that the North was

¹Salvatore Cafiero e Alessandro Pizzorno, "Sviluppo Industriale e Imprenditori Locali," in Il Mezzogiorno nelle Ricerche della Svimez 1947-1967, pp. 523-52. Also, Salvatore Cafiero, Le Migrazioni Meridionali (Roma: Giuffrè Editore, 1964), Part II, pp. 47-73.

²Northerners do not in general object to move to the South, as opposed to Southerners who prefer to remain in the South, if they can help it. See Vöchting, "Considerations on the Industrialization . . . ," pp. 328-31.

³The 1964-66 recession started in the first quarter of 1964 and lasted till the end of 1966. Comparing the average rate of failure for the years 1964 to 1966 with the rate of failure in 1963 in the North, we find that the rate of business failures increased by about the same amount as the corresponding increase for the South (26% as opposed to 22%). The 1955-57 recession started in the second quarter of 1955 and lasted till the first quarter of 1958. Comparing the average rate of failure for the years 1955 to 1957 with the rate of failure in 1954 in the North, we find that the rate of business failures increased less in the North than in the South (16% as opposed to 34%).

more adversely affected than the South by cyclical fluctuations. If anything, the reverse was true. In addition, only 6 out of the 14 years considered were years of recession. Because of these things, I think that the testing procedure used above, though far from perfect, retains some validity.¹

In order to increase our confidence in the conclusion reached, some additional pieces of evidence will be presented. The first one is that the estimated increase in the value of the manufactured imports of the South from the North, over the 1951-1967 period, was very small,² both in absolute terms and in relation to the increase in the total value of the manufacturing production of the South. This is shown in Table 27. From this table it can be seen that the value of the manufactured imports of the South from the North increased by only 93 million dollars or 29%,³ while

¹By saying that the test has some validity, I am not in any way asserting that no single Southern manufacturing firm went out of business as a direct result of Northern competition. There might have been single individual cases of this occurring but this certainly was not a widespread phenomenon as we were led to expect by an uncritical reading of Myrdal and Hirschman. Additional evidence will now be introduced to put this conclusion on more solid ground.

²Or even negative, depending on the years used for comparison. More on this on the next footnote.

³This is obtained by comparing the 1951 figure to the 1967 one. If we compared the yearly average for the 1951-53 period with those of the 1965-1967 period, we find that the value of the net imports of manufactured goods of the South from the North fell by 125 million dollars or by 40%. If we used the yearly average for the 1951-1955 and 1963-1967 periods (to smooth out the recession years of

TABLE 27

VALUE OF MANUFACTURING PRODUCTION OF THE SOUTH AND
ESTIMATES OF THE VALUE OF THE NET MANUFACTURING
IMPORTS OF THE SOUTH FROM THE NORTH, 1951-1967
(In Millions of Dollars; 1963 Prices)

Year	Value of Manufacturing Production of the South	Estimates of the Value of the Net Imports of the South of Manufactured Goods from the North
1951	625	281
1952	639	375
1953	678	503
1954	780	368
1955	838	461
1956	887	305
1957	940	303
1958	951	272
1959	1,032	349
1960	1,097	428
1961	1,170	584
1962	1,320	540
1963	1,478	852
1964	1,566	653
1965	1,724	251
1966	1,916	159
1967	<u>2,117</u>	<u>374</u>
Total	19,758	7,058

Source: For column (1): Mariano D'Antonio, Lo Sviluppo delle Regioni Italiane (Napoli: Giannini, 1969), p. 101.

For Column (2): Reproduced from column (7) of Table 30.

the increase in the manufacturing production of the South was equal to 1.5 billion dollars or about 109% (of the mean value of manufacturing production at the beginning and at the end of the period considered). Though these are net figures, they do tend to indicate that Southern manufacturing firms faced little pressure from manufactured imports from the North since the composition and the value of Southern manufactured exports to the North is widely acknowledged (though exact figures are not available) to have been very little both at the beginning and at the end of the period considered.¹

Another, and more conclusive piece of evidence supporting the conclusion reached above comes from a field study conducted by CENSIS which indicates that almost all of the manufacturing firms that went out of business in the South were food processing firms, textile firms, construction firms, and firms in the apparel sector. The study indicated that most of the food processing firms, construction firms, and firms in the apparel sector went out of business because of technological advance and the expansion of other firms in these same sectors within the South

1964 and 1966), we get identical figures (with those for 1951-1953) for the value of the net manufacturing imports of the South from the North. The values obtained by comparing 1951 and 1967 will be used, subsequently, since they were neither years of recession nor inflation.

¹Lutz, "Some Structural Aspects . . . ," pp. 380-83; Capperdoni, Lo Sviluppo Italiano . . . , pp. 147-63.

rather than because of the competition of Northern firms. In the case of textiles, the study found that both Northern and Southern firms went out of business because of foreign competition.¹ The very large increase in the value of the manufacturing production of the South occurred mostly in the large scale, technologically-advanced, highly capital-intensive government industries (steel, chemicals, petroleum refining) which replaced Southern imports of these products from the North. On the other hand, in almost all of the more sophisticated types of capital goods (petroleum drilling apparatus, complex machinery, electronic equipment) and in the more advanced types of consumer goods (cars, television sets, washing machines) the South continued to be throughout all of the period considered almost completely dependent on Northern imports and imports from other nations.²

Finally, a fairly reasonable explanation can be advanced for the relatively fewer failures of manufacturing business firms in the South than in the North from 1953 to 1966. This can be explained by the fact that most of the improvements in transportation, and the consequent opening

¹CENSIS, Rapporto Monografico sulle Ristrutturazioni Industriali (Roma: CENSIS, 1969), pp. 1-106.

²This topic will be discussed in more detail and sources given in Chapter VII. Also to be noted is that these are the areas where the establishment of Southern industries were discouraged because of the existence of already established firms in the North. This more dynamic Backwash Effect on the South will be analyzed and measured in Chapter VI.

up of new markets in the South for the manufacturing firms of the North, took place much earlier (than 1951) in Italian history. It was at that time that the shock was felt in the South and many of its manufacturing firms may have gone out of business as a result of it. It is likely that all those Southern manufacturing firms which could not compete with the more modern Northern ones, had already gone out of business long before 1951. Those that remained must have been competitive with Northern firms even though they used traditional methods of production. These were small firms serving only the communal market and which produced furniture, shoes, apparel, bricks, and few other manufactured goods which could be produced either with more modern methods or with traditional ones--but where the latter were and are competitive.¹

The lack of widespread Backwash Effects of this type arising from the importation of manufactured goods by the South from the North does not, of course, preclude the possibility, indeed the likelihood, that new manufacturing firms were not set up in the South and that the growth of existing manufacturing firms in the South was impeded because of the possibility of importing additional manufactured products from already established and efficient

¹The diagramatic technique usually used to demonstrate this possibility is very familiar and will not be repeated here. See Hirschman, "Investment Policies . . .," pp. 558-60; also Richard S. Echaus, "Factor Proportions in Underdeveloped Areas," American Economic Review, XLV (September 1955), 539-65; and many others.

Northern producers. As mentioned earlier, this more dynamic type of Backwash Effect will be analyzed and measured in the next chapter, where it will be found to be positive and fairly large.

Thus the conclusion to be reached in this section is that the value of the net imports (or better the increase in the value of the net imports of manufactured goods by the South from the North) did not seem to cause any observable failure (aside, perhaps, from few, single and individual instances) in manufacturing firms in the South (and thus this Backwash Effect will be taken to be zero); rather, if any Backwash Effect occurred, it may have resulted from an impediment to the growth of existing firms and to the establishment of new firms.¹

If we inquire for the reason for the relatively larger ratio of failures of manufacturing firms in the North than in the South, from 1951 to 1968, the answer lies in the fact that this was a period of trade liberalization after the autarkic policies of the fascist regime, and the new manufacturing firms, that were set up in the North, rather than in the South, during that earlier period, were now quite suddenly and inexorably exposed to more competitive foreign firms.² Thus what must have occurred in the

¹This will be discussed in Chapter VI.

²This process was accelerated with the formation of the Common Market in 1958 which culminates in 1970 in the removal of all qualitative and quantitative restrictions to the intra-market movement of goods.

South during the last half of the past century (as it was unified with the North and as improvements were made in transportation) must have occurred in the North during the period under consideration: 1951-1968 (because of the trade liberalization policies of the postwar democratic government of Italy).

Finally, the Backwash Effect arising from the national tariff policy must be analyzed and measured. The higher price paid by Southerners for imported manufactured goods from the North rather than for the cheapest foreign manufactured goods will have to be estimated. This is done in Tables 28 and 29. In Table 28, column (1) gives the total value of the net imports of the South from outside (from the North and from other nations). Columns (2) and (3) give the total market value of agricultural foodstuffs consumed and produced in the South, respectively. By subtracting the production figures of column (3) from the consumption figures of column (2), the market value of the net imports of foodstuffs from outside are obtained; these are given in column (4). By then subtracting column (4) from column (1), the market value of the net imports of manufactured goods, agricultural raw materials, and minerals of the South from outside is found: column (5). Column (6) gives the market value of the net imports of agricultural raw materials and minerals of the South from outside. Since the North lacks agricultural raw materials and minerals,

TABLE 28

VALUE OF NET IMPORTS OF THE SOUTH FROM THE NORTH AND FROM OTHER
NATIONS, BY TYPE OF PRODUCT, 1951-1968

(In Million of Dollars; 1963 Prices)

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1951	1,162	2,518	1,930	588	574	293	281	62
1952	1,561	2,638	1,762	876	685	310	375	83
1953	1,387	2,778	2,171	607	780	277	503	111
1954	1,461	2,827	2,006	821	640	272	368	80
1955	1,739	2,915	1,918	997	742	281	461	83
1956	1,585	3,000	2,022	978	607	302	305	55
1957	1,458	3,114	2,235	879	579	276	303	65
1958	1,560	3,280	2,262	1,018	542	270	272	49
1959	1,652	3,418	2,371	1,047	605	256	349	49
1960	2,208	3,602	2,206	1,396	812	384	428	60
1961	2,215	3,824	2,587	1,237	978	394	584	82
1962	2,559	3,953	2,390	1,563	996	456	540	76
1963	2,828	4,173	2,707	1,466	1,362	510	852	85
1964	2,806	4,269	2,597	1,672	1,134	481	653	65
1965	2,084	4,336	2,870	1,466	618	367	251	25
1966	2,242	4,470	2,765	1,705	537	378	159	16
1967	2,326	4,629	3,123	1,506	820	446	374	22
1968	--	--	--	--	--	399	--	--

Legend:

- (1) Total value of the net imports of the South from abroad.
- (2) Total market value of agricultural foodstuff consumed in the South.
- (3) Total market value of agricultural foodstuff produced in the South.
- (4) Market value of net imports of agricultural foodstuff of the South.
- (5) Market value of net imports of manufactured goods, raw materials and minerals of the South.
- (6) Market value of net imports of raw materials and minerals of the South from other nations.
- (7) Market value of net imports of manufactured goods of the South from the North.

1955	1,739	2,915	1,918	997	742	281	461	83
1956	1,585	3,000	2,022	978	607	302	305	55
1957	1,458	3,114	2,235	879	579	276	303	65
1958	1,560	3,280	2,262	1,018	542	270	272	49
1959	1,652	3,418	2,371	1,047	605	256	349	49
1960	2,208	3,602	2,206	1,396	812	384	428	60
1961	2,215	3,824	2,587	1,237	978	394	584	82
1962	2,559	3,953	2,390	1,563	996	456	540	76
1963	2,828	4,173	2,707	1,466	1,362	510	852	85
1964	2,806	4,269	2,597	1,672	1,134	481	653	65
1965	2,084	4,336	2,870	1,466	618	367	251	25
1966	2,242	4,470	2,765	1,705	537	378	159	16
1967	2,326	4,629	3,123	1,506	820	446	374	22
1968	--	--	--	--	--	399	--	--

Legend:

- (1) Total value of the net imports of the South from abroad.
- (2) Total market value of agricultural foodstuff consumed in the South.
- (3) Total market value of agricultural foodstuff produced in the South.
- (4) Market value of net imports of agricultural foodstuff of the South.
- (5) Market value of net imports of manufactured goods, raw materials and minerals of the South.
- (6) Market value of net imports of raw materials and minerals of the South from other nations.
- (7) Market value of net imports of manufactured goods of the South from the North.
- (8) Estimate of the higher price paid by the South to import manufactured goods from the North rather than from other nations.

Source: For Columns (1), (2), and (3): Elaboration on ISTAT, I Conti Economici . . ., pp. 22, 30, 43, 55, 30-31, respectively.

For Column (4): Obtained by subtracting col. (3) from col. (2).

For Column (5): Obtained by subtracting col. (4) from col. (1).

For Column (6): Elaboration as explained in text on: Banca D'Italia, Relazione, for the years 1951-1968, Balance of Payments Section.

For Column (7): Obtained by subtracting col. (6) from col. (5). Reason given in text.

For Column (8): Obtained by multiplying col. (7) by the nominal tariff rate on imports of manufacturing goods from abroad--as explained in text.

just as much as the South, and since, as it was seen earlier, the South is a net importer of raw materials from the North (but to an insignificant degree), the assumption is thus made (quite realistic) that the entire value of these imports came from other nations. The way the market value of the net imports of agricultural raw material and minerals of the South from other nations was found was to take the total net national values of these imports, and divide it by the fraction of the national industrial output arising in the South. This fluctuated from 19% in 1951 to 17% in 1967.¹ Column (7) is then obtained by subtracting column (6) from column (5) and gives the market value of the South's net imports of manufactured goods. Even if all of these were imported from the North, we see that these values are relatively small and have increased very little.² If we now multiply the value of the manufactured imports into the South by the average national nominal tariff rates on the importation of these goods, we get a rough upper limit to the loss of purchasing power which took place in the South

¹ISTAT, I Conti Economici . . . , pp. 30-31. To the extent that the South is more dependent on foreign sources of agricultural raw material and minerals, the figures obtained are underestimates.

²They also represent an upper limit since at least some of the manufactured goods imported into the South must have come from other nations (and assumes that the entire burden is passed on to the consumer). The value of this, however, is likely to have been small--at least as long as some restriction on the movement of goods within the Common Market still existed.

as a result of the national tariff policy.¹ The values thus obtained were divided by the resident population of the South to measure the size of this Backwash Effect on the South.² The actual size of this Backwash Effect on the South is given in Table 29.

TABLE 29

BACKWASH EFFECT ON SOUTH DUE TO NATIONAL TARIFF
POLICY ON MANUFACTURED IMPORTS
(In Dollars per Capita at 1963 Prices)

Year	1951	1952	1953	1954	1955	1956	1957	1958	1959
Value	3.45	4.61	6.17	4.44	4.61	3.06	3.62	2.72	2.72
Year	1960	1961	1962	1963	1964	1965	1966	1967	Total
Value	3.16	4.32	4.00	4.47	3.42	1.32	0.84	1.16	58.09

Source: Table 28, column (8) in Chapter VI, and Table 19, Row (1) in Chapter III.

¹The average, nominal tariff rate which Italy imposed on the importation of manufactured goods from abroad was 22% from 1951 to 1954, 18% from 1955 to 1958 (Gardner Ackley and Lamberto Dini, "Tax and Credit Aids to Industrial Development in Southern Italy," Banca Nazionale del Lavoro, Quarterly Review (December 1959), pp. 341-45); 14% from 1959 to 1962 on the manufactured imports from other Common Market countries, 10% from 1963 to 1966, 6% from 1967 to 1970, and a zero tariff from 1970 (Emile Benoit, Europe at Sixes and Sevens: the Common Market, the Free Trade Association, and the United States (New York: Columbia University Press, 1961), pp. 20, 23, 27). Because of locational advantages, it is assumed that the other five nations of the Common Market represented the cheapest foreign source for the importation of all the manufactured goods which the South needed.

²Since there was no shortage of investment funds in the South, the reduction of purchasing power will be considered as reducing consumption expenditures only in the South, without directly affecting the level of Southern investment. (The latter would have had to be considered, if there had been, instead, a shortage of investment funds in the South.)

From Table 29, it can be seen that this Backwash Effect caused a reduction in the real per capita income of the South which ranged from 6.17 dollars in 1953, to 84 cents in 1966 (or from 1.7% to 0.1% of the net real per capita output of the South, respectively). For the entire 1951-1967 period, the total reduction in the real per capita income of the South amounted to 58 dollars or 9% of the net real per capita output of the South, in 1967.

Three observations must be made with regard to the figures just presented: (1) they are almost certainly over-estimates because they are based on the assumption that all of the manufactured goods which the South imported came from the North; some of these--although not much--may have come from other nations, especially because, as part of the development program of the South, some capital goods coming from abroad were exempted from import tariffs; (2) the size of this Backwash Effect is small in relation to the total Spread Effects arising from emigration of surplus labor from the South (shown in Table 19, in Chapter III) plus the sum of the remittances of Southern workers who emigrated to the North (shown in Table 22, in Chapter IV); and (3) the Backwash Effect being considered here becomes practically¹ zero in 1970 when all internal tariffs on commodity trade within the E.E.C. are abolished.

¹"Practically," because the assumption is made that the pre-tariff price of any manufactured commodity imported by the South is lower (or equally priced) within the Common Market as it is outside it.

Summary and Conclusion

From this chapter it can be concluded that the rapid expansion that took place in the North from 1951 to 1968: (1) did not and could not stimulate the production of agricultural raw materials and minerals in the South; it was seen that the North as well as the South satisfy most of their additional needs of these factors from abroad; (2) the production of foodstuffs in the South responded (to an increased demand for these commodities in the North) to an insignificant degree (about 50 million dollars worth); more than enough stimulus already existed within the South (Southern production of raw agricultural food products could not even keep up with its own expansion in demand) so that had demand not expanded in the North, Southern resources would probably have been fully employed to satisfy more of its domestic needs; (3) the value of the South's imports of manufactured goods from the North expanded by a small amount (if at all), compared to a very rapid expansion of production of these commodities within the South, so that pressure on Southern manufacturing firms from imports from the North must have been minimal; the test performed showed no observable occurrence of this type;¹ (4) the only Backwash Effect

¹The conclusions reached in this chapter might seem somewhat puzzling. In the analysis of the preceding two chapters it was found that a great deal of surplus labor (both in agriculture and in "industry") existed in the South together with excess bank funds, at least during some years. The question might then be asked as to why

of some relevance, observed was that which resulted from the national tariff policy. However, this Backwash Effect becomes practically zero in 1970.

agricultural and industrial expansion did not proceed faster in the South. The answer lies, among other things, in the lack of additional fertile agricultural land in the South and in the discouragement to the expansion and to the setting up of new manufacturing firms in the South because of the competition of already established and efficient Northern firms. (This latter aspect will be analyzed in detail in the next chapter.)

CHAPTER VI

NET EFFECT, INTERACTIONS, AND MORE DYNAMIC ASPECTS

Introduction

This chapter is subdivided into four parts. In part one, the net effect of the interregional movement of people, capital, and goods on the average real per capita income of the South and on the structure of its economy, will be analyzed. In part two, interactions among the various Backwash and Spread Effects (thus far treated as being simply additive) will be looked for. In part three, the more dynamic aspects of the theory of the Backwash and Spread Effects will be analyzed. Finally, in part four, the conclusions presented in the first part of this chapter will be modified in the light of the findings of parts two and three. We will then be in a position to determine if (as predicted by Myrdal and Hirschman) the Backwash Effects exceeded the Spread Effects in the Italian South thus hindering its development and contributing to widening inequalities between the North and South of Italy.

Net Effect

In this section, the various Backwash and Spread Effects that were analyzed and measured in Chapters III, IV, and V, will be brought together so as to strike a balance among them. This is done in the table that follows.¹ In Table 30, column (1) gives an estimate of the output released by emigrants during each year of the period considered and available, on the average, to each person remaining in the South. Column (2) indicates the dollar value of the remittances (sent back by Southern workers who emigrated to the North) per person living in the South, per year. Column (3) is obtained by adding columns (1) and (2) and measures the total value of those Spread Effects on the South which were measured and found to be of considerable magnitude. The only Backwash Effect on the South of some importance was found to be that which resulted from the national tariff policy on the importation of manufactured goods from abroad. An estimate of this Backwash Effect for each year is presented in column (4). By subtracting this Backwash Effect (column 4) from the total of the Spread Effects (column 3), we get the net effect on the South for each year (column 5). From column (5) it can be seen that

¹In that table, only those Backwash and Spread Effects which in Chapters III, IV, and V were found to be of significant magnitude are included. Those that were found to be very small or zero do not appear in the table but will be discussed later.

TABLE 30

NET EFFECT OF THE BACKWASH AND SPREAD EFFECTS
ON THE SOUTH, 1952-1967(In Dollars per Capita at 1963 Prices--
unless otherwise specified)

Year	(1) Spread Effect Due to Emigration	(2) Spread Effect from Emigrants' Remittances	(3) Total of Spread Effects	(4) Backwash Effect Due to National Tariff Policy
1951	--	2.00	--	3.45
1952	0.26	2.72	2.98	4.61
1953	0.53	3.05	3.58	6.17
1954	0.79	2.78	3.57	4.44
1955	1.08	2.78	3.86	4.61
1956	1.41	3.78	5.19	3.06
1957	1.86	4.78	6.64	3.62
1958	2.30	6.28	8.58	2.72
1959	2.84	6.44	9.28	2.72
1960	3.41	7.05	10.46	3.16
1961	4.95	8.21	13.16	4.32
1962	6.25	9.47	15.72	4.00
1963	7.83	9.42	17.25	4.47
1964	8.67	9.53	18.20	3.42
1965	9.47	10.89	20.36	1.32
1966	10.16	11.68	21.84	0.84
1967	11.11	10.68	21.79	1.16
1968	12.71	11.42	24.13	--
Total	85.63	123.06	206.69	58.09

Source: For Col. (1): Table 19, Row 5, Chapter III.
 (2): Table 22, Col. 6, Chapter IV.
 (3): By adding Col. (1) and (2).
 (4): Table 29, Chapter V.
 (5): By subtracting Col. (4) from (3).
 (6): Table 19, Row 1, Chapter III.
 (7): Col. (5) as a % of Col. (6).

ECTS

(4) Backwash Effect Due to National Tariff Policy	(5) Net Spread Effect on the South	(6) Net per Capita Output of the South	(7) Net Spread Effect as a Percentage of per Capita Output
3.45	--	--	--
4.61	-1.63	333	-0.49
6.17	-2.59	367	-0.68
4.44	-0.87	367	-0.24
4.61	-0.75	372	-0.20
3.06	2.13	388	0.55
3.62	3.02	413	0.73
2.72	5.86	424	1.38
2.72	6.56	437	1.50
3.16	7.30	448	1.63
4.32	8.84	489	1.81
4.00	11.72	498	2.35
4.47	12.78	537	2.38
3.42	14.78	543	2.72
1.32	19.04	574	3.32
0.84	21.00	591	3.53
1.16	20.63	632	3.26
--	--	633	--
58.09	127.92		

II.

IV.

om (3).

II.

).

there was a net Backwash Effect on the South from 1952 to 1955 and a net Spread Effect from 1956 to 1967. This net Spread Effect on the South from 1956 to 1967 (measured in dollars per person living in the South),¹ ranged from 2 dollars in 1956 to 21 dollars in 1966 or from 0.55% to 3.53% (respectively) of the real per capita output of the South in those years. The tremendous quantitative importance of the net benefit which accrued to the South from 1956 to 1967 in the course of the unhampered operation of the market mechanism can be expressed by saying that during these 12 years (1956-1967) the net benefit on the South amounted, on the average, to 2.1% per year of the real regional per capita output. This compares with a 4% actual increase in the real per capita output of the South, on the average, over the same period.² For the entire 16-year period as a whole (1952-1967), there was a net Spread Effect on the South of 128 dollars (at 1963 prices). This

¹The rate at which development proceeds should be measured not only by the rate of growth in real per capita income but also by the structural changes that take place in the economy of the underdeveloped country or region. The structural changes taking place in the economy of the South as a result of the interregional flow of people, capital, and goods were always kept in mind and will be discussed in a moment. Any factor which though affecting the regional real per capita income positively, adversely affects its economic structure should be viewed with suspicion and should not generally be included as a Spread Effect. By and large, the net Spread Effect on the South (measured here primarily by its effect on the real per capita income in the South) was accompanied by structural changes favorable to its development.

²See Table 30.

represented over 40% of the 300 dollars increase in the real per capita output that took place in the South from 1952 to 1967.

The figures just presented must be regarded as underestimates of the net Spread Effect on the South. This is so because the Spread Effects were deliberately measured conservatively, while for the Backwash Effect, an upper limit (and very likely an overestimate) was used. This was done consciously so that there should be no doubt as to the direction of the net effect of the Backwash and Spread Effects involved.¹

Embarrassingly for this author, all the many other Backwash and Spread Effects analyzed turned out (very conveniently, it must be admitted) to be either zero or insignificantly small. Thus there was very likely no Backwash Effect from emigration; that is, no shortage of workers or skills is likely to have arisen in the South as a result of the emigration of part of its labor force to the North (see Chapter III). There was no Backwash Effect on the South from the interregional flow of savings between the South and the North. In fact, it is very likely that a net North-South flow of savings occurred during the period under consideration, and this was beneficial to the South. No houses (economically located) or fields were abandoned in the South

¹Since the Spread Effects were measured conservatively while the Backwash Effect is certainly an overestimate, it is possible that even in the 1952-1955 period there was a net Spread Effect on the South.

as a result of emigration to the North, so that there was no Backwash Effect from this source, either (see Chapter IV). Finally, manufacturing firms in the South seem not to have gone out of business because of the competition from manufactured goods imported from the North (see Chapter V).

Similarly, many Spread Effects were found to be completely, or almost entirely, non-existent. Thus very little, if any, Northern private direct investments took place in the South since the South had practically no natural resource (mineral deposits, potential sources of agricultural raw materials, etc.) awaiting to be tapped. Likewise, the agricultural output of the South failed to respond to any relevant degree to the rapid expansion that took place in the North from 1951 to 1968 in the demand for these products. The structural changes that took place in the South will now be considered.

As was seen in Chapter III, the Southern emigrants that went to the North were very likely either dependents or redundant labor for the South. Their emigration, not only resulted in an increased availability of output for the people remaining in the South and in making it possible to have higher consumption and savings per capita in the South (from emigrants' remittances), but also reduced the rate of open and disguised unemployment so that the proportion of the number of "effectively unemployed" to the total number in the labor force of the South, was increased. This is,

perhaps, the most important Spread Effect on the South, from a structural point of view. In addition, since most emigrants were in the reproductive age group, a higher subsequent birth rate in the South must have been avoided,¹ and the children born in the future by these emigrants may have more than neutralized the higher labor-force participation among emigrants (46%) than for the Southern population as a whole (37%).² Finally, since relatively few of Southern workers who emigrated to the North came from agriculture (only about 5% of the total), the structural benefit on the economy of the South that would have resulted from a reduction in the excessive proportion of the total labor force in agriculture, was simply not there.³ On the other hand, the higher price that Southerners paid to import

¹ Figures on this aspect will be presented in the next part and in the next chapter.

² ISTAT, IX^o Censimento Generale della popolazione, 4 Nov. 1951, VII, 212-13. The figure of 37% was obtained by finding the percentage of the Southern population which was "active" (part of the labor force--whether employed or looking for a job).

³ It might be argued that since 95% of the workers who emigrated from the South to the North came from outside agriculture, the proportion of the total labor force remaining in that sector after emigration (to the North) was larger than before, in the South. This statement is true but irrelevant. What is important is the ratio of the number of "effectively employed" to the number in the labor force as a whole and within each of the sectors of the economy. The relatively smaller number of workers emigrating from agriculture than from other sectors, only means that this ratio increased faster (as a result of the pattern of emigration of workers from the South to the North) in the industrial and service sector than in agriculture.

manufactured goods from the North rather than from abroad could not possibly have prevented a beneficial structural change from taking place in the economy of the South (e.g. by greater investments in industry and service sectors so as to increase the relative importance of these sectors vis-à-vis agriculture, in the South) since lack of investment funds was not a bottleneck to faster Southern growth during the 1960's. The higher price paid only reduced the overall level of savings and the purchasing power of Southern Lire spent on consumption. Thus the main structural benefit that occurred in the South as a result of the emigration to the North was to reduce the rate of unemployment and increase the ratio of the number of "effectively employed" to the total number in the labor force. No harmful structural change seems to have resulted in the South from what has been considered up to now.

From what has been said so far (and before considering the modifications introduced by the interactions among the various Backwash and Spread Effects and the more dynamic aspects of the theory--both to be discussed next), it can be concluded that during most of the period considered, the total of the Spread Effects exceeded the total of the Backwash Effects in the Italian South, and that the net effect of the unhampered operation of the market mechanism for the period as a whole (1952-1967) was beneficial to the South.¹

¹I will return to this tentative conclusion in the last section of this chapter.

Interactions

So far the various Backwash and Spread Effects were treated as being simply additive. The question of simultaneity (i.e., that there might exist interactions among them, that were now picked up) will not be raised. The number of such interactions that might theoretically exist among the many Backwash and Spread Effects analyzed is indeed great; however, since in this empirical situation so many of these effects were not operating, it should be expected that the number of observable interactions would be greatly reduced.

In vain have I looked for interactions that were both observable and significant in the Italian case and which might modify the tentative conclusions reached in the first part of this chapter.¹ In what follows some of the most important interactions that were looked for, will be discussed.

Perhaps, the potentially most important of the interactions which were looked for, is the one which could have occurred from a change in the net import position of the

¹In the theory section, it was stated that these interactions need not necessarily exist in a specific real world situation--only that in an actual situation they must be looked for. In the Italian case, they were looked for but none were found to exist--again to the embarrassment of this author. The author, however, is not responsible for this and was prepared--indeed, would have welcomed the opportunity--to analyze significant interactions, had they been found to occur.

the South vis-à-vis the North of Italy. Such a change would have caused a multiple expansion or contraction in the regional N.N.P. of the South, which could have been properly analyzed by a multiplier-accellerator technique.¹ However, as it was seen in Chapter V, the increase in the value of the net imports (of manufactured goods) of the South from the North, from 1951 to 1968, was very small and was, more or less, neutralized by the small increase in the value of the net exports (of foodstuffs) from the South to

¹In a somewhat forgotten but important article (suggested to me by Professor Conrad), Duseberry discusses and applies such a multiplier-accellerator analysis to the settlement of the American West, and the effect which this had on the regional N.N.P. of the East. Duseberry concluded that in the short-run, the regional N.N.P. of the East fell as a result of the settlement of the West. (The East developed a net import position with respect to the West, in the early stages of the latter's settlement, as Eastern agriculture declined with the expansion of agricultural output on the Western virgin land. This caused a multiple contraction in the N.N.P. of the East.) In the later stages of the settlement of the West, however, the net export position of the West in relation to the East, caused a multiple expansion of the N.N.P. of the West which, reinforced by an accellerator, resulted in such a higher N.N.P. in the West that it induced a sharp increase in Western imports from the East. This, eventually, resulted in a higher N.N.P. in both the East and the West.

One shortcoming of the analysis is that Duseberry assumed a closed economy. This assumption might have been fairly realistic for the United States of the times, but it would certainly not be for present-day Italy; nevertheless, and keeping in mind that the Italy of the 1950-1970's moved closer and closer to an open economy, it would have been interesting to apply such a multiplier-accellerator analysis to the Italian context--if the South's net import position vis-à-vis the North had changed over the period considered. More will be said on this in the next section.

See: James Duseberry, "Some Aspects of the Theory of Economic Development," Explorations in Entrepreneurial History, III, No. 2 (December 1950), 63-102.

the North. Thus, there was practically no change (as far as the aggregate figures shown in Chapter V go) in the net import position of the South vis-à-vis the North. This caused neither a multiple expansion nor contraction of the real aggregate N.N.P. of the South (leaving no basis for a multiplier-accellerator analysis).¹

Related to what was said above is the interaction which could have taken place between the failure of manufacturing firms in the South (due to imports of manufactured goods from more efficient Northern firms), the resulting multiple contraction of the real regional N.N.P. of the South (as those businesses which provided the failing firm with raw materials and its workers with food and services, lost the outlet for their products), and the possible increase in the agricultural raw material and food exports of the South to the North as less of these commodities were demanded within the South because of the original failures of manufacturing firms in the South.² As was seen by the test (and the discussion surrounding it) conducted in Chapter V, there was very little tendency for manufacturing

¹The free movement of manufactured goods from the North into the South might have discouraged the expansion of Southern manufacturing firms and the setting up of new manufacturing firms in the South. This more dynamic (and more evasive) aspect of the theory of the Backwash and Spread Effects will be considered in the next section.

²This case was discussed in greater detail, theoretically, in Chapter II.

firms in the South to go out of business as a result of the importation of manufactured goods from the North, thus there was no multiple contraction in the South, and no effect (from this source) on the value of the agricultural exports of the South to the North (see Chapter IV). No interaction of this sort could have taken place because the event that was to trigger it off, failed to occur.

Similarly, no interaction took place between the net South-North migration and the exports of the South (to the North) of the commodities (such as food specialties, religious articles, etc.) which the emigrants traditionally consumed in the poor region, before emigrating. As will be seen in the next section, Southerners tend to imitate Northerners (and the people in the more advanced foreign nations) in their consumption tastes (when the income of Southerners, whether living and working in the South or the North, allows them to), so that almost all of the consumption needs of emigrants are very likely to have been satisfied by the output of the North (or by importation from other nations). In addition, it is to be expected that in most cases, the quantitative importance of this interaction would be very small, indeed.

Finally, as it was pointed out in the previous chapter, the higher price paid by Southerners to import manufactured goods from the North than from abroad (because of the national tariff policy) could not have prevented

industrial investments in the South (and thus benefit the structure of its economy) because there was no shortage of savings in the South during most of the period considered.

It is idle to continue in discussing all the other possible interactions which could theoretically have taken place but which did not occur in the case under consideration. Because so few of the Backwash and Spread Effects were found to be of importance, the number of interactions to be considered were greatly reduced and of these, none were observed. As a result, the conclusions (as to the net effect on the South of the unhampered operation of the market mechanism) presented in the previous section, need not be modified: the Spread Effects overwhelmed the Backwash Effects (in the case of the Italian South) by a significant amount from 1956 to 1967.

More Dynamic Aspects

In this part, the more dynamic aspects of the theory of the Backwash and Spread Effects will be analyzed. To be sure, most of these are very elusive and very hard to evaluate--to say nothing of the difficulties involved in attempting to actually measure them.¹ Nevertheless, these dynamic aspects represent a very important and integral part of the theory of the Backwash and Spread Effects. In fact, they could conceivably be used as the "Deus-ex-machina" by those

¹For this very reason they have been postponed till now.

who blindly hold on to the conclusions that an underdeveloped region must necessarily be harmed by its relation with the more advanced region--if the market mechanism is allowed to operate unhampered. It is particularly important to get (as far as possible) a quantitative estimate of the size of those dynamic factors which were harmful to the South, so as to be able to see if the conclusion, tentatively reached at the end of part one, can be retained, or should be discarded (and reversed). Invariably, many entirely qualitative factors will be met; these will cause no difficulty if they operate in a manner which is beneficial to the South (they simply reinforce the conclusion already advanced). It is those that are harmful to the South that must be handled with extreme care.

By far, the potentially most harmful effect on the South (of the more dynamic type now under consideration) is the discouragement to the setting up of new manufacturing firms in the South and the discouragement to the expansion of already existing Southern firms that might have resulted from the possibility of freely (that is, without any quantitative or qualitative restriction on trade) importing manufactured goods from the already established and efficient Northern firms. That is, certain manufactured goods which could conceivably have been produced within the South (even if, perhaps, less efficiently than in the North) were instead imported from the North. This prevented existing

Southern firms from expanding and new manufacturing firms from being established in the South and prevented a potential increase in the manufacturing output of the South. That some of this must have taken place is beyond doubt; the problem is in trying to get even a rough quantitative estimate of this dynamic Backwash Effect on the South. The best and perhaps only way to do this, is to look at the size of the absolute net import position of the South in manufactured goods (almost all of which from the North), over the period considered.¹ This averaged to about 400 million dollars per year at 1963 prices (and did not increase much) from 1951 to 1967.² Four hundred million dollars then represent the maximum, or upper limit, by which the South could have increased the level of its industrialization by a policy of import-substitution (which the South would have been able to adopt, if it had not been an integral part of Italy). However, a more realistic and acceptable policy of import substitution would probably have had to stop far short of this upper limit, especially in the short-run when the South's needs of manufactured goods from

¹After all, it was the possibility of importing manufactured goods from the North that acted as a disincentive to the expansion of already existing manufacturing firms and to the establishment of new manufacturing firms in the South; therefore, the actual value of the net imports of the South in these commodities represents the closest approximation to the loss of potential output in the South, as a result of its association with the North.

²See Table 28, column 7, in Chapter V.

outside, especially machinery, might conceivably increase rather than decrease. It is likely that the South might have been able to replace by domestic production, at most, one-half of the value of its net imports of manufactured goods in each year.¹

In the course of pursuing such a policy of import substitution, the production of foodstuff, agricultural raw materials, and minerals in the South would be stimulated. However, as was seen in Chapter V, more than enough stimulus already existed in the South, so that very little if any increase in the output of these commodities would or could have taken place. On the other hand, imports of foodstuffs, agricultural raw materials, minerals, semifinished industrial products, and capital goods from outside the South would be greatly increased. It has been estimated that the total marginal propensity to import (henceforth M.P.M.) of the South from the North and from other nations, is equal to 0.56.² This extremely high value of the M.P.M. of the South, means that in the course of expanding the

¹Admittedly, 50% is an arbitrary figure. But this is more likely to be an overestimate of how far a policy of import substitution could be carried, than an underestimate. At least this is what can be gathered by the experience of nations such as India. See John P. Lewis, Quiet Crisis in India (New York: Doubleday, 1964), pp. 40-43, 99-101.

²Franco Pilloton, Effetti Moltiplicativi degli Investimenti della Cassa per il Mezzogiorno (Roma: SVIMEZ, 1960), p. 20. This is confirmed by Hollis B. Chenery and Paul G. Clark, Interindustry Economics (New York: John Wiley & Sons Inc., 1959), p. 318. Pilloton's estimate was 0.57; Chenery's estimate was 0.56.

manufacturing output of the South (to replace part of its net imports of the South in these commodities), only about 44% of the final market value of this increased output was likely to represent the net value added within the South-- and it is this figure (of the net value added within the South) and not the final market value of the increase of the manufacturing output of the South, that is of interest to us. Let's take stock of what was done. A policy of import--substitution on the part of the South with respect to its net imports of manufactured goods was used to estimate (in the absence of any more direct way to measure it) the harm that resulted in the South from the discouragement to the setting up of new manufacturing firms there and the expansion of already existing firms (since manufactured goods could be imported "freely" from the North). It was assumed that the South could reasonably expect to replace by domestic production, at most, 50% of its yearly net imports of manufactured goods. But only 44% of this would represent value added in the South. To get an estimate of the size of this more dynamic Backwash Effect on the South, the following was done: the yearly figures of the value of the net imports of the South in manufactured goods were divided by 2; 44% of the resulting figures were found; these were then divided by the population of the South in the various years. The result is shown in column (2) of Table 31. Column (1) of that table reproduces the net

TABLE 31

REVISED NET EFFECT ON THE SOUTH OF THE BACKWASH AND SPREAD
EFFECTS, SO FAR MEASURED, 1952-1967

(In Dollars per Capita at 1963 Prices--unless otherwise specified)

Year	(1) Net Spread Effect (Tab. 30, Col. 5)	(2) Additional (Dynamic) Backwash Effect	(3) Revised Net Spread Effect	(4) Revised Net Spread Effect as a % of Per Capita Output
1952	-1.63	4.58	-6.21	-1.86
1953	-2.59	6.15	-8.74	-2.38
1954	-0.87	4.50	-5.37	-1.46
1955	-0.75	5.63	-6.38	-1.72
1956	2.13	3.73	-1.60	-0.42
1957	3.02	3.70	-0.68	-0.16
1958	5.86	3.32	2.54	0.60
1959	6.56	4.27	2.29	0.52
1960	7.30	4.96	2.34	0.52
1961	8.84	6.76	2.08	0.43
1962	11.72	6.25	5.47	1.10
1963	12.78	9.87	2.91	0.54
1964	14.78	7.56	7.22	1.33
1965	19.04	2.91	16.13	2.81
1966	21.00	1.84	19.16	3.24
1967	20.63	4.33	16.30	2.58
Total	127.92	80.36	47.46	

Source: See text.

Spread Effect on the South (as it appeared in column 5 of Table 30), before this more dynamic Backwash Effect was considered. Column (3) is obtained by subtracting column (2) from column (1) and gives "revised" values of the Net Spread Effect on the South. Column (4) then expresses the values of column (3) in terms of percentages of the real per capita output of the South, in each year. From this table, it can be seen that in 6 out of the 16 years considered (1952-1957) there was a net Backwash Effect on the South, while from 1958 to 1967 there was a net Spread Effect. This net Spread Effect ranged from 0.43% to 3.24% of the yearly real per capita output of the South. Thus, the conclusion reached at the end of part one of this chapter needs to be qualitatively modified only for the years 1956 and 1957. Quantitatively, it must be modified for the entire period under consideration: during the first part of the period considered the size of the net Backwash Effect is sharply increased, while the average net Spread Effect on the South for the years 1958 to 1967 is reduced to 1.37% per year (column 4) from an average of 2.1% per year for the years 1956-1967. If the entire period (1952-1967) is taken as a whole, there was a net Spread Effect of about 47 dollars per capita at 1963 prices. This represents 16% of the 300 dollar increase in the net real per capita output that occurred in the South from 1952 to 1967.

One additional dynamic force which might have proven to be harmful to the South was the demonstration effect (through television, radio, newspapers, travel, etc.) on the people of the South resulting from their being part of a nation which included a more developed and dynamic region. The imitation of the expenditure pattern in the North may have reduced the willingness and ability to save on the part of the people of the South and might have resulted in a lower level of investment in the South. However, it is clear that no such Backwash Effect occurred in the South since the South had excess saving during many years of the period considered. In addition, the South would have imitated the expenditure pattern of more developed nations, even if it were not part of Italy (though this imitation would probably have proceeded to a lower degree if the South were an independent nation). Moreover, the demonstration effect must have operated not only to increase the level of expenditures of the people of the South, but also to increase their willingness to work more and harder in order to satisfy their wetted appetites for new consumption goods.¹ Thus on balance, the demonstration effect must have proved beneficial to the South--at worst no Backwash Effect was involved.

A third, dynamic Backwash Effect on the South might have resulted from emigration and might have eluded the

¹SVIMEZ, *Trasformazioni Culturali e Sociali in Italia e Loro Riflessi sulla Scuola* (Roma: Giuffrè, 1962), p. 22.

measurement performed in Chapter III. Even though in that chapter it was concluded that no shortage of skills probably resulted in the South from the emigration of part of its labor force to the North, it is possible that the most dynamic, intelligent and enterprising of the workers possessing a particular skill (say, mechanical engineers) emigrated. This emigration, though causing no shortage of any skills in the South (say, no shortage of mechanical engineers), might have removed the best elements within each specific category, so that those who were employed in the South were not among the most able that were generated by the economy of the South. Without denying this possibility in some empirical situations, the case of the Italian South seems to have been just the opposite. Many large scale, technologically advanced, industrial firms were set up in the South since 1951. These, as pointed out in Chapter III, pay as high real wages, offer as many opportunities for on-the-job training and for advancement, as Northern firms. They are also located near large urban areas. When it is added that Southerners, no matter what their educational level, are disliked in the North, this leaves no doubt that, for those skilled jobs that are important in the modern world, the South was in a better position to hire the best elements it generated, while leaving unemployed the worst (most of whom eventually emigrated to the North). The study on the university graduates,

discussed in Chapter III, confirms the view exposed above. That study shows that, of the class of 1966, those who graduated with honors or with the best grades were the first to find employment in the South, while the poorer students had greater difficulty in finding employment in the South and were represented disproportionately among those who emigrated to the North.¹ This view is also accepted by Professor Galasso, a "Meridionalista" and population expert at the University of Naples. At a recent conference (on the South) held in Turin, he stated:

". . . We should not believe that the human qualities required of those who remain in the South and succeed in the difficult environment of human competition prevailing in the South, are inferior to the ones possessed by those who emigrate to the North. . . ." ² Thus probably no harmful effect on the South resulted from the source, either.

On the other hand, many dynamic Spread Effects accrued to the South because of its association with the North. Perhaps the most important of these is the reduction in the widespread condition of open and disguised unemployment prevailing in the South in the early 1950's. This also resulted in higher per capita incomes and a greater ability on the part of Southerners to consume

¹CENSIS, Indagine sui Laureati . . . , pp. 81-82.

²Giuseppe Galasso, "Il Mezzogiorno nel Quadro Demografico dell'Evoluzione Italiana," p. 128; published in: Fondazione Einaudi, Nord e Sud, pp. 122-43.

manufactured goods. This must have caused a "threshold" to be reached in the quantity demanded of many commodities, thus justifying the establishment of many new firms and even entirely new industries. This was certainly one of the contributing factors of the high growth rate in the manufacturing output of the South.¹

As mentioned in part two, the proportion of emigrants in the reproductive age group greatly exceeded that proportion for the South as a whole.² This must have caused a greater reduction in the subsequent population growth of the South than could be inferred by looking simply at the number of emigrants, without considering also their age distribution. The children born by these emigrants, after emigration, may also have more than neutralized the higher labor-force participation rate among emigrants (46%) than for the population of the South as a whole (37%).

¹The manufacturing output of the South, in terms of 1963 prices, grew, from 1951 to 1967, by 109% of the mean value. That of the North rose by 106%. The objection is not valid, that since the South started from a low absolute level, it was easy for it to achieve impressive rates of growth. The South started (in 1951) with a level of manufacturing output about equal to that of the Northeast and that of the Center. The respective rates of growth of the manufacturing output were as follows: South = 109%, Center = 99%, Northeast = 117%, Northwest = 105%. See: Enrico Capperdoni, Lo sviluppo delle Regioni Italiane . . ., p. 101.

²Seventy-two per cent of the emigrants from the South were between the ages of 15 and 45 (ISTAT, Annuario di Statistiche Demografiche, 1956-1966), while the figure for the population of the South as a whole was 43% (ISTAT, X^o Censimento Generale della Popolazione, 15 Ottobre 1961, Dati Generali Riassuntivi, Vol. IX [Roma, 1969], pp. 127-32).

In the South, over the period considered, the power and prestige of the local land-owning élites has irreversibly gone down not only because of the land reform that expropriated (with compensation) their lands in many parts of the South (this will be discussed in Chapter VII), but also because of the possibility open to people in rural areas--not only farmers--to emigrate to the North (and to other nations).¹ The mentality of these local élites--a vestige of Feudalism--was an important stumbling block to Southern development. Their fear of change and their desire to keep their dependents and those in the same community in a servile state, stifled the development of self respect, confidence in one's ability, and entrepreneurial spirit in the South. Breaking their power and prestige thus represented a "sine qua non" in order for the South to break out of stagnation. The possibility of emigrating to the North after World War II,² was an important contributing factor to the almost complete achievement to this end (by the late 1960's).

In addition, the emigration of workers from the South to the North (in general, more skilled than those emigrating

¹Cafiero, Le Migrazioni Meridionali, pp. 32-35.

²The fascist regime had imposed restrictions on emigration to the North and abroad. The laws against internal migration remained on the books until 1961, when they were repealed. However, since the end of the war these laws were not enforced at all. See Dott. Pilade Di Rienzo, Movimento Migratorio Interno in Base alle Iscrizioni e Cancellazioni Anagrafiche per Trasferimento di Residenza (Roma: ISTAT, 1965), pp. 3-12.

to other nations) prevented a shortage of labor in the North and contributed to a faster rate of growth in the real N.N.P. of the North, than would otherwise have been possible. This permitted the North to extend more development aid to the South.

Finally, the fact that the South was part of Italy did not relegate the South to specialize in the production of traditional L-intensive commodities, while satisfying its needs of more K-intensive manufactured goods from the North. This could conceivably have given rise to claims that the North forced the South into this state of affairs and thus kept the South into a subordinate status. However, this did not take place. Indeed, most of the increase in the industrial output of the South took place in new K-intensive products (steel, chemical, petroleum, mechanical, and that of other "modern" industries).¹

On the other hand, there were many dynamic beneficial effects which failed to occur in the South. Perhaps the most important of these is the failure on the part of Southerners to end their traditional mistrust of Northern values, aims, and civilization. This is very serious not only because it undermines the national fabric but also--and much more crucial for the South--because it implies that Southerners still fail to accept fully the basic underlying

¹The reason and the forces behind this development will be explored fully in Chapter VII.

values common to all developed and dynamic areas.

Southerners would certainly like to have the higher incomes prevailing in the North, but they bitterly criticize the cold and impersonal way of doing business prevailing in the North; they criticize the smog, the broken families, and the drug problem of the North. Thus they fail to realize that these problems (though one should try to reduce them as much as possible) are to a great extent a concomitant of industrialization. Their vehement exposure of these evils of modern civilization, I believe, only covers up for their continued mistrust and lack of complete acceptance of modern civilization itself. Vöchting hit the mark perfectly when he stated, with regard to the South:

Industrialization was felt to be a violent intrusion of moral rather than material forces, and as the imposition of an alien way of thinking and still more of an alien way of life. The Southerners rebelled against the idea of being educated to new ways of living, of which he failed to recognize the pretended superiority. . . . There was widespread resistance against submitting to the leadership of a class of unwanted and alien educators who claimed to act not only as guides toward the realization of a better economic system but also as apostles of a higher form of civilization. The resistance was the greater since this new civilization demanded a great level of discipline on the part of the worker and an effort to economize time, in the race with machine production.¹

An approach, on the part of Southerners, to the Northern ways of thinking and behaving could have proven to be, in the long-run, one of the most important Spread Effects, of

¹Vöchting, "Considerations on the Industrialization . . . ," p. 328.

the more dynamic type, which could have resulted in the South from its association with the North. This, however, did not occur to any significant extent. One of the conclusions that will be reached in evaluating the development program of the South is that growth will not become spontaneous or self-generating in the South (i.e. without government direct intervention), unless and until Southerners become willing to pay the price for the benefits resulting from development. Up to now, my impression is that they are still unwilling.

Another beneficial effect that failed to take place in the South is a sufficiently widespread reorganization of its methods of productions, particularly in agriculture. Up to now emigration has proven entirely beneficial; indeed, in the absence of birth control it was a necessary (though not a sufficient) condition for development. But it is conceivable that in the future (say, 5 or 10 years from now), if emigration continues without any reorganization of production along more rational lines,¹ many economic opportunities will be missed thus reducing the rate of development of the South below its potential.²

¹In agriculture this would involve the abandonment of marginal lands, the extension of the size of the farm unit, widespread use of machinery, producing products suited to the soil of the South, etc.

²The fact that the South was an integral part of Italy should have rendered this task easier (e.g. by imitating the North). If the necessary rationalization of production did not take place, the fault must be placed squarely at the doorsteps of the South.

From what was said in this part, it can be concluded that all the more dynamic Backwash Effects analyzed (with the exception of the first one discussed), were either zero or if positive, they were more than overwhelmed by opposing forces. This left several of the more dynamic Spread Effects on the South to operate unhampered. It was also pointed out that the South still seemed to be unwilling to accept modern civilization (because of its many warts); the South also failed to respond to an "acceptable" degree, to the incentive provided by being associated with the North, to revise its methods of production along more rational lines.

What we are left with is then the conclusion that was reached after the discussion of the first dynamic Backwash Effect on the South, with the proviso that for yet other reasons (those discussed in the last several pages) that conclusion has a downward bias (i.e. the positive net Spread Effects on the South shown by the figures of Table 31 are underestimates of their true real world values).¹

Conclusion

In this chapter, all the Backwash Effects and Spread Effects measured in Chapters III, IV, and V were brought together so that their net effect could be arrived at. It

¹No quantitative upward revision in the figures shown in Table 31 was possible, however, due to the qualitative nature of the factors analyzed.

was found that from 1952 to 1955 there was a net Backwash Effect on the South, while from 1956 to 1967 the Spread Effects exceeded the Backwash Effects so that the unhampered operation of the market mechanism benefited the development of the South. Quantitative estimates of this net Spread Effect on the South were given in Table 30. There were, in addition, many benefits of a structural kind on the economy of the South.

Of the many possible interactions which could theoretically have taken place among the various Backwash and Spread Effects, none were found to have occurred in the Italian South from 1951 to 1968.

Only one fairly large Backwash Effect, of a more dynamic kind, was found to have operated in the South during the period considered. This involved the discouragement to the setting up of new industrial ventures in the South (and to the expansion of already existing ones) due to the competition of already established and efficient Northern firms. A very rough indirect quantitative estimate could be obtained of this more dynamic Backwash Effect. When considered together with the results previously obtained, it was found that the conclusion reached earlier had to be changed both qualitatively and quantitatively--qualitatively: there was now a net Backwash Effect from 1952 to 1957; quantitatively: the net Spread Effect for the years 1958-1967 was somewhat reduced, especially in the early part of

the period. If we consider the entire 16-year period (1952-1967) as a whole, there was a net Spread Effect on the South equal to about 47 dollars per capita (at 1963 prices). This represented about 16% of the 300 dollars increase in the net yearly real per capita output of the South. Thus, contrary to the assertion of Myrdal, Hirschman, and many others, if we consider the entire 1952-1967 period as a whole, the unhampered operation of the market mechanism was not the vehicle of greater regional inequalities but proved to be of great benefit to the Italian South.

While recognizing that it represents an anti climax (as far as the central hypothesis of this dissertation is concerned), this dissertation would not be complete without an evaluation (necessarily brief) of the size and pattern of the government aid to the South. This will be done in Chapter VII. We will then be in a position to estimate the total benefit accruing to the South from its association with the North (that which resulted from the free operation of the market mechanism plus the direct aid extended by the North to the South) and the results achieved as far as the development of the South and as far as the change in the North-South regional inequalities are concerned.

CHAPTER VII

GOVERNMENT'S AID TO THE SOUTH

Introduction

It was seen in the previous chapter that the South benefited from its association with the North, in the course of the unhampered operation of the market mechanism, during the period under consideration. Thus government aid to the South, far from having to neutralize a net Backwash Effect (before it could have a net positive impact), worked in complete harmony to market forces to produce, in this poor region, conditions more amenable to its development.

In this chapter, the aid which the central government extended to the South will be analyzed, both from a quantitative and from a qualitative point of view. In the first part, the government aid to the South through the fiscal system will be discussed. In the second part, the government development program (from 1951 to 1968) will be presented. In part three, the development program will be evaluated. In part four the new policy suggestions stemming directly from the work of the previous chapters, will be introduced. Finally, in the last part, the economic changes that took place in the South, both in absolute terms and in

relation to those that occurred in the North during the same period, will be evaluated.

For obvious reasons, the presentation in this chapter makes no pretense of being exhaustive--to do that an entire volume would be needed.

Government Aid to the South
through the Fiscal System

The following table shows the amount of money (in million of dollars, at 1963 prices) which the central government raised in the form of taxes in the North and in the South and the amount which it spent in each region, from 1951 to 1968.¹ As can be seen from Table 32, the amount of taxes which the Central Government raised in the North exceed the Central Government's expenditures in the North, in all but one year (1965). For the entire 18-year period, the excess of taxes raised over expenditures amounted to 24.2 billion dollars. On the other hand, in each and every year from 1951 to 1968, the Central Government's ordinary expenditures in the South exceeded the amount of taxes it raised there. This excess was about 9.3 billion dollars for the entire period, and averaged to about 517 million dollars, per year.²

¹To be noted is that "government expenditures" refer here only to the ordinary, day to day expenditures to provide public services and excludes the extraordinary expenditures of the government development program for the South.

²For the nation as a whole, and on the assumption of a balanced budget over the entire period, this leaves about 14.9 billion dollars (24.2 billion minus 9.3 billion) of excess taxes raised over ordinary expenditures of the

TABLE 32

TAXES RAISED AND ORDINARY GOVERNMENT EXPENDITURES, IN NORTH AND SOUTH, 1951-1968
(In Millions of Dollars, at 1963 Prices)

	North			South		
	Expenditures	Taxes	Exp.-Taxes	Expenditures	Taxes	Exp.-Taxes
1951	3,056	3,696	- 640	915	575	340
1952	3,288	3,988	- 700	997	637	360
1953	3,244	4,284	- 1,040	1,075	706	369
1954	3,388	4,352	- 964	1,046	728	318
1955	3,486	4,570	- 1,084	1,155	802	353
1956	3,548	4,805	- 1,357	1,102	788	314
1957	3,688	4,973	- 1,285	1,188	831	357
1958	4,260	5,548	- 1,288	1,270	862	418
1959	4,338	6,862	- 2,524	1,310	919	391
1960	4,438	6,727	- 2,289	1,415	951	464
1961	4,728	6,803	- 2,075	1,458	1,030	428
1962	5,305	7,332	- 2,027	1,678	1,080	598
1963	5,181	7,106	- 1,925	1,829	1,016	813
1964	6,252	8,568	- 2,316	1,980	1,257	723
1965	9,691	9,395	+ 296	1,892	1,279	613
1966	10,567	11,992	- 1,425	2,135	1,176	959
1967	10,370	11,241	- 871	1,965	1,387	578
1968	12,494	13,185	- 691	2,441	1,535	906
Total	101,222	125,427	-24,205	26,861	17,559	9,302

Source: Ministero del Tesoro, Gazzetta Ufficiale (Roma: Istituto Poligrafico dello Stato, 1951-1969).

This 9.3 billion dollars represented, then, a direct transfer of economic resources, through the fiscal system, from the North to the South and enabled the poorer region to provide for more public services for its residents than it could have afforded if it had to rely only on its tax revenues. The accusation raised during the final quarter of the last century that the central government raised more taxes in the South than it spent there is no longer valid for the post-war period. A great deal of the public consumption of the South was now being subsidized by taxes raised in the North. That it is only fair that the richer region should shoulder a relatively heavier burden than the poorer one in order to provide approximately uniform government services throughout the entire nation, is fully justified by present-day notions of social equity and justice. But the fact remains that had the South insisted on being an independent unit, it certainly could not have expected nor would have been able to receive this form of aid. The benefits of independence, such as they

central government, to be accounted for. The amount to be accounted for, is actually somewhat larger than 14.9 billion dollars, because there was a net deficit (relatively small) in the central government budget, over the 18-year period considered. The excess of resources raised through taxation and by a net budget deficit, from 1951 to 1968, has been used almost entirely for the central government extraordinary expenditures in the South (i.e., to finance the government development program for the South; this program will be discussed in the next section). Only a small fraction represented the central government extraordinary expenditures in favor of Northern depressed areas and for that part of the land reform which involved the North.

are (i.e., more control over its own destiny, ability to impose external tariffs to protect infant industries, etc.) cannot and should not be viewed in isolation but must be viewed in unison to the benefits which it accrues to the poor region by being a part of a larger economic and political unit which includes a richer region. It is, of course, true that this use of tax money (that is, this transfer, through the fiscal system, to subsidize public consumption in the poor region) is not the most effective way to use scarce resources to stimulate Southern development. However, it must also be recognized that the line between what represents consumption and what represents investment in an underdeveloped region is even more hazy than for a developed nation.¹

The Central Government's Development
Program for the South

In 1950, Il Comitato dei Ministri per il Mezzogiorno (Committee of the Ministers for the South) was created. It included the President of the Council of Ministers, the Minister of the South, and the Ministers of: Agriculture, Industry, Commerce, Public Works, State Holdings, and Treasury. The functions of the Committee of Ministers for the South were to create special agencies to develop and carry out the various aspects of the development program for the South, to issue general guidelines for these special agencies

¹Hans W. Singer, "Social Development: Key Growth Sector," International Development Review, VII, N. 1, March 1965, 3-8.

to follow, to see that these general guidelines were actually carried out, and to coordinate the efforts of the various agencies. The bodies entrusted with the carrying out of the development program were the following: the Land Reform Agency, La Cassa per il Mezzogiorno, Special Credit Institutes, and the State-Holding Companies.¹ The work of each of these bodies will now be discussed in brief. Before doing that a word of warning is in order: no concise statement is available on the work of each of these agencies, the amount they spent, and their achievements, and the many books that have been written on this subject (even the official publications) are very ambiguous and full of inconsistencies.² It is to be hoped that what follows removes most of the ambiguities and inconsistencies that plague most other works on the subject and at the same time present a concise but fairly accurate description of what actually happened.

The Land Reform

The first massive action that the state took in the South was a sweeping land reform which took place over three distinct time periods: 1951-1960, 1961-1965, 1966-1970. Although this was not exclusively a Southern measure, it

¹Lutz, Italy - A Study . . ., p. 101.

²The only exception is the book of Vera Lutz mentioned above, but since that was completed in 1961, it does not include the many new developments that have taken place since then.

affected predominantly the South since over 70% of the area covered by it was located in the South.

From 1951 to 1960, the reform was directed toward the expropriation of large estates and the distribution of the land to landless peasants. More specifically, the reform involved the following steps:

1. Expropriation of large estates;
2. Payment to the owners of expropriated lands was made in negotiable state obligations, earning 5% interest per year and maturing in 25 years;
3. Assignment of expropriated lands to landless peasants, after having improved it;
4. Payment for assigned land was not to exceed $\frac{2}{3}$ of the agency's cost in acquiring the land and was to be paid in the form of a 30-year, 3.5% mortgage. Within this period, the land could not be further subdivided among heirs;
5. Gave technical, economic, and financial assistance to the new landed peasants.

From 1951 to 1960, 450,000 hectares of land were expropriated and distributed to landless peasants in the South. This constituted 10% of all private land holdings in the South. The average quota of land assigned to each family was 2.1 hectares. The cost to the government for the Southern portion of the land reform was about one billion dollars

(at 1963 prices).¹

From 1961 to 1965, the land reform was given the name of "The First Green Plan." The purpose of this plan was threefold:

1. to construct agricultural experiment stations in the South;
2. to increase productivity by specializing in crops more suited to the climate and soil of the South;
3. to establish badly needed low-interest credit facilities for farmers.

About two billion dollars (at 1963 prices) were spent in the South during this First Green Plan.²

The Second Green Plan started in 1966 and ran to 1970.

The aims of the plan were two:

1. to establish farm cooperatives on a large scale;
2. to promote consolidation of at least 3 million uneconomically small farms into larger and economically more rational units.

Cooperatives were needed for providing grading, processing, refrigeration and transport. In order to promote the establishment of such cooperatives, the government paid half of the salaries of cooperative managers and their assistants in the early years of their establishment and put up the entire cost of some of the more expensive equipment like

¹Lutz, Italy - A Study . . ., pp. 183-88.

²Ibid., p. 189.

refrigeration plant and slaughter-houses. The consolidation of small farms into sufficiently large ones was to be achieved by providing farmers with credit of up to 80% of the money needed, at 1% interest over forty years, on condition that they buy enough land to make a unit economic to run. Over the first 3 years of this program (1966, 1967, and 1968), about one billion dollars (at 1963 prices) was spent in the South.¹

Thus, from 1951 to 1968 (inclusive) the central government spent about 4 billion dollars (at 1963 prices) on the land reform in the South.²

La Cassa per il Mezzogiorno

The major instrument of change in the South was not, however, the land reform, but the Cassa per il Mezzogiorno. The Cassa was established in 1950 (but did not begin operations until 1951) to administer the government Southern development program--that is, to undertake activities specifically directed at assisting the economic and social progress of Southern Italy. Since its inception, it was established that the work of the Cassa was to be entirely of an extraordinary character; that is, in addition to, rather than replacing the regular activities of the various

¹"Italy: Plan without Muscle," The Economist (February 6, 1968), pp. 278-79.

²Almost another 2 billion dollars (at 1963 prices) was spent on that portion of the land reform which affected areas in the North. But the entire cost of the land reform (in the North and the South) was born by the North.

ministries. Working within the guidelines drawn by the Committee of Ministers, the Cassa assumed responsibility for planning, carrying out, and coordinating the projects which it undertook. The state assumed the responsibility of providing the Cassa with tax funds. Originally the Cassa was intended to remain in operation for 10 years; subsequently, its life was expanded to 12 years, later to 15, and finally to 25 years (to 1985).¹ From 1951 to 1968 inclusive, the Cassa spent about 5.6 billion dollars (at 1963 prices) on its many projects to develop the South. The amount spent during each year is shown in the table that follows. From Table 33, it can be seen that the Cassa spent from 200 to 400 million dollars per year on the development of the South, and that the amount actually spent generally increased through time.

¹La Cassa per il Mezzogiorno, La Cassa per il Mezzogiorno (Roma: Ufficio Stampa, 1967), pp. 1-130.

TABLE 33

YEARLY EXPENDITURES OF CASSA ON THE DEVELOPMENT
OF THE SOUTH, 1951-1968
(In Millions of Dollars, at 1963 Prices)

Year	Amount	Year	Amount
1951	269	1961	382
1952	258	1962	362
1953	205	1963	327
1954	229	1964	308
1955	228	1965	437
1956	229	1966	412
1957	220	1967	387
1958	274	1968	408
1959	237		
1960	386	Total	5,558

Source: Cassa per il Mezzogiorno, Bilancio 1968 (Roma: Ufficio Stampa, 1969), p. 177.

Table 34 shows how the 5.6 billion dollars spent by the Cassa during the period considered was allocated among the various uses. From that table it can be seen that 66% of all expenditures were allocated for infrastructures (social overhead capital), 28% for incentives to private initiatives, and only 6% for human development.

Originally the Cassa was given a big role in agriculture since agriculture had generally been regarded as the South's major problem, while in the industrial field its task was confined to the improvement of environmental conditions or the so-called infrastructures. Thus between 1951 and 1957, the aim was development of a preindustrialization nature, which would ultimately set the goal of industrialization. Since 1957, stimulus to rapid industrialization has

TABLE 34

ALLOCATION OF THE FUNDS SPENT BY THE CASSA,
FROM 1951 TO 1968, BY USE
(In Millions of Dollars, at 1963 Prices)

Sectors	Amount	Percentage
Infrastructures	3,686	66
Roads, railroads, ferries, airports	819	15
Acqueducts and sewers	779	14
Irrigation, reclamation, flood and erosion control	1,707	31
Hotels, excavations, etc. (to encourage tourism)	381	6
Incentives to Private Initiatives	1,560	28
Subsidies to farmers for land use improvements	730	13
Incentives to industrial undertakings	700	13
Subsidies to handicrafts and fishing	130	2
Improvements of the Human Factor	372	6
Vocational Training	220	4
Hospitals	92	2
Total	5,558	100

Source: Cassa per il Mezzogiorno, L'Attivita della Cassa al 31 Dicembre 1968 (Roma: Ufficio Stampa, 1969), pp. 1-5.

been in the forefront of the Cassa's action in the Mezzogiorno. The reason for this reversal of policy (from agriculture to industry) was due to the fact that by 1957 it had become apparent that trying to heal a sick agriculture would not alone solve the South's economic problems. More rapid industrialization clearly appeared necessary to absorb the very large and chronic unemployment which had plagued the South since

the end of the war.¹ I will first describe briefly the Cassa's work in the area of infrastructures and in agriculture, and then its work in industry.

In the area of infrastructures, from 1951 to 1968, 3,600 km of new roads were constructed and 15,800 km were improved; 540 km of new railroads were constructed, and 3 new ferries were put in service to connect the island of Sardinia to the continent. 2,500 new reservoirs and 13,300 km of aqueducts have been constructed which provided drinking water to 2,068 communes with a total population of 8.3 million people.

In agriculture, the work of the Cassa was in addition to the land reform previously described. While the projects were distributed among all the regions of the South, the largest percentage was distributed among coastal planes rather than in the mountainous interior because here the returns were substantially greater and could be achieved relatively faster. Most of the projects were in land reclamation, flood and erosion control, and irrigation. Top priority had to be given to irrigation because of the almost complete absence of running streams in the South. What was done was to collect winter waters in reservoirs and use it for irrigation during the dry summer months. The result of this was an extension of the irrigated land of the South of 400,000 hectares; in addition 383,000 hectares of marshland were

¹La Cassa per il Mezzogiorno, La Cassa per il Mezzogiorno, pp. 1-130.

reclaimed; flood and erosion control included, among other things, reforestation of 132,000 hectares, and the construction of 16 reservoirs which were also used to generate hydroelectric power. Still in the field of agriculture, 730 million dollars in subsidies were provided by the Cassa to Southern farmers, from 1951 to 1968, for land use improvements. They were used to construct or improve 131,000 farm houses, for the construction of 91,000 stables, for the construction of 2,000 food processing plants, and for the creation of 185 technical assistance stations for farmers with a total permanent staff of about 500 technical personnel.

Since 1957, however, the Cassa has put more emphasis on industrial development. In this area the government has considerably increased incentives to private enterprise and also decided to intervene directly. To this end a number of industrial areas and industrial nuclei were carefully selected and established. Each was provided with adequate water and power supplies, roads and public services, hospitals, schools, markets, and banks, thus enabling it to draw on the sizeable and readily available work force. It was believed that as these areas achieved a high level of industrialization, areas around it would also be stimulated to become industrialized. Based on these considerations and taking into account the potential of the various localities, the following industrial zones have been chosen: Bari, Brindisi, and Taranto in Apulia; Pescara in Abruzzi; Salerno and Caserta in Campania; Cagliari in Sardinia; and Siracusa

and Palermo in Sicily. Naples (in Campania) and Catania (in Sicily) were already operating industrial zones in 1951. In addition to this, about 21 lesser zones called "nuclei industriali" have been designated to date¹ (see the map that follows).

To achieve industrial expansion in designated industrial areas and nuclei, the Cassa offered an impressive list of incentives to private business, as follows:

1. Exemption for 10 years from income taxes. This is a sizeable benefit since this tax might normally account for 18 to 25% profits (provided that profits are made!).

2. 50% reduction of the turnover tax on machinery and raw materials.

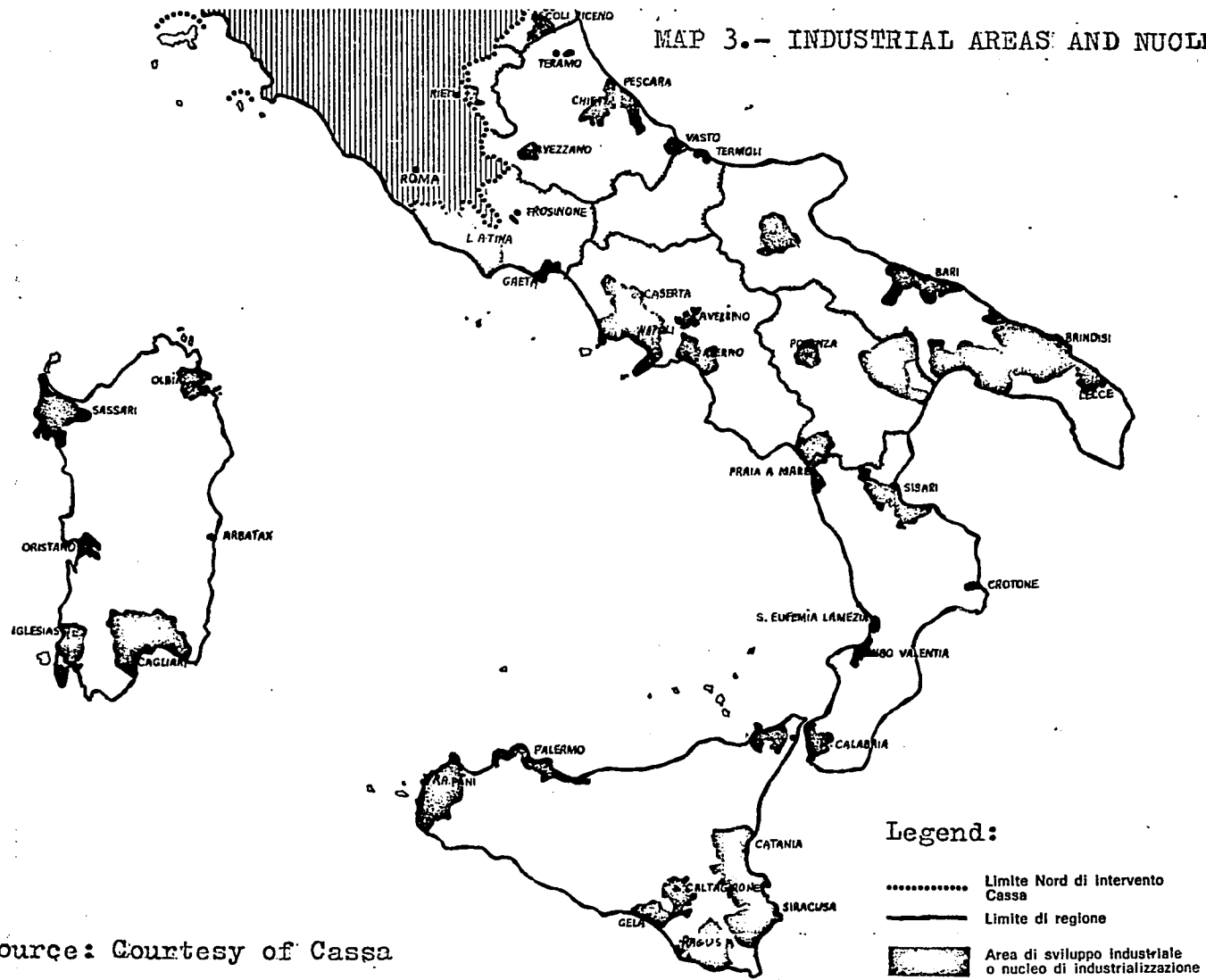
3. Exemption from custom duties for imported machinery and materials.

4. Since 1957, the Cassa was authorized by the government to grant capital subsidies to medium and small size industrial concerns. These capital grants could amount to up to 20% of the cost of buildings and of the construction of links with roads, railways, sources of power, and up to 10% of the cost of fixed equipment and of expanding the initial establishment.²

¹La Cassa per il Mezzogiorno, La Cassa per il Mezzogiorno, pp. 33-34.

²The above represent in an extremely simplified fashion only very few of what I believe to be the most significant of the incentives to industrial development granted by the Cassa. The complete and detailed list of incentives granted by the Cassa fills an entire book of 226 pages (of

MAP 3.- INDUSTRIAL AREAS AND NUCLEI



Source: Courtesy of Cassa

Special Credit Institutes

In 1954, three special state-owned and controlled banks were established to extend credit on easy terms to Southern industries. These three credit corporations are known as ISVEIMER (operating on the South Italian mainland), IRFIS (operating in Sicily) and CIS (operating in Sardinia). They were established in order not to impose on the Cassa the additional responsibility of supervising industrial credit. The need for these banks was felt as the result of the reluctance of other Italian banks to provide cheap credit to Southern investors. The president of each of the three banks is nominated by the Ministry of the Treasury. The funds of these banks are provided by the Cassa's borrowings from international agencies and by floating bonds in the Italian market. The difference between the borrowing rates and the lower rates at which these 3 banks lend, plus their operating costs, is provided by the Treasury out of tax money.¹ From 1954 to 1968, this amounted to about 300 million dollars (at 1963 prices). The credit corporations are interested in lending funds only to small and medium size (500 employees or less) firms in industry. (Handicrafts are only eligible for the Cassa's credit.) The loans are granted at a rate of 3% per

small print) and is so intricate and utterly confusing as to defy imagination. SVIMEZ, Sintesi delle Agevolazioni per lo Sviluppo Economico del Mezzogiorno (Roma: SVIMEZ, 1969), pp. 1-226.

¹Lutz, Italy - A Study . . ., pp. 200-22.

year for a maximum period of 13 years (comparable industrial loans by private banks in the North charge an interest of 7% for a maximum period of 10 years). Priority in granting loans is given for new plants rather than for the expansion of already existing plants, and to those firms which offer the best prospects of absorbing manpower (without, however, hampering economic efficiency). By the end of 1968, about 2 billion dollars (at 1963 prices) of industrial loans had been granted to 1,264 firms. In number, food processing plants led the list; by amount of credit received, chemical producing firms received the largest share of funds. These institutions were in a position to satisfy a very high proportion of applications for industrial loans.¹

State-Owned Corporations (I.R.I. and E.N.I.)

In 1957, a law was passed by the Italian Parliament requiring all firms owned and controlled by the state to concentrate 60% of their new investments in the South and to work toward the goal of having 40% of their total investments there. Thus, the state was using the industries it controlled as an instrument to promote economic development in the South alongside other developmental efforts being made in that region. There are two state-owned corporations (I.R.I. and E.N.I.), which, because of their importance, cannot be left

¹Cassa per il Mezzogiorno, Bilancio 1968, pp. 294-347.

out of any account of the development program for the Italian South. I will discuss each in turn.

I.R.I., or Institute for the Reconstruction of Industry, is a vast government holding company created in 1933 to bail out a banking system stuck with industrial holdings that were becoming increasingly illiquid. In this way, I.R.I. found itself controlling and financing a large slice of Italian industry. In 1937, I.R.I. was changed from a kind of official receiver to permanent manager of the government's industrial holdings. Today, I.R.I. is a dominant factor in the Italian market. This is closely shown in the following table:

TABLE 35

RELATIVE WEIGHT OF I.R.I. HOLDINGS IN 1962 BY SECTOR

Banking	23%
Electricity production	27%
Steel production	56%
Cement production	10%
Shipbuilding	80%
Highway construction	50%
Maritime transport (Gross Tonnage)	63%
Mechanical engineering (sales)	80%
Air transport	100%
Telephone	100%

Source: The Economist (February 15, 1964), p. 641.

In 1962, I.R.I. employed 300,000 industrial workers and produced \$4 billion of goods and services. The flexibility of "I.R.I.'s formula" is shown by the following considerations:

1. Though owned by the government, I.R.I.'s budget and financial dealings are completely separated from the

general governmental budget; that is, it does not depend on annual parliamentary appropriations. This permitted I.R.I. to by-pass the inefficient bureaucracy and to get things done fast.

2. The main sources of finance for its operations are reinvestment of profits, borrowing on the open market (without government guarantee), and capital grants from the government.

3. I.R.I. operates in every way as a private company: it follows the rules of profit and loss and is able to hire and fire personnel, including managers (there is no civil service security tenure).

Thus I.R.I., with its great financial strength, flexibility of operation, and 3/5 of its investments channelled, by law, into the South, it has become an important partner of the Cassa in providing a framework of industrialization for the region. I.R.I.'s policy has been to create industries in the South for the production of basic commodities like steel, cement, raw synthetic rubber and fibers. For example, in 1954, I.R.I. completed (at a cost of \$500 million) Europe's largest steel mill (2.2 million tons per year) at Taranto, which is now operating competitively, i.e., without subsidies. The hope is that their presence in the South (in addition to the credit incentives given by the credit corporations and the other incentives given by the Cassa) will lead to the development of secondary industries

there and also to an export trade to the Eastern Mediterranean area.

More recently, I.R.I. has undertaken to provide technical training in the South, not only to satisfy its demand for technicians but also to provide technicians for other firms in the area. The beginning is modest (it involves only few thousand students and the courses last for only six months) but it could conceivably become of growing importance in view of the fact that technical training in Southern Italy, both in the state educational system and in private industry, is very backward.

E.N.I., or Ente Nazionale Idrocarburi, is a gigantic state owned holding company which was created in 1953 and put under the direction of E. Mattei. Its activities include: research and exploration, drilling, refining, transporting, and retailing petroleum products, mining, textile and heavy machinery production, and the construction of motels. Most of the rules that regulate I.R.I.'s operations also regulate E.N.I.'s. By 1962, E.N.I. had capital assets valued at almost 3 billion dollars, it employed 56,000 workers in Italy and 6,300 abroad (mostly in petroleum exploration, drilling, and related activities).

From 1957 to 1968, I.R.I. and E.N.I. invested about 4 billion dollars (at 1963 prices) in the South. It is impossible to establish how much of these investment funds in the South came out of their operating profits, how much out of the borrowing in the national financial markets, and how much from government tax revenues. What is known is that

most of its borrowed funds came from the North and, of course, all of the funds which the government contributed to it came exclusively from taxes raised in the North.¹

Summary and Conclusions

The size of the overall financial aid received by the South, from 1951 to 1968, is shown in the following summary table. This table includes the government aid which the South received through the fiscal system plus the financial resources spent in carrying out the development program for the South.

TABLE 36

OVERALL FINANCIAL AID RECEIVED BY THE SOUTH, 1951-1968 (In Millions of Dollars, at 1963 Prices)	
Financial aid through the Fiscal System	9,302
Financial aid through the development program:	
Land Reform	4,000
Cassa	5,558
Interest subsidization to loans of special credit institutes	300
Industrial loans made by special credit institutes	2,000
Industrial investments of I.R.I. and E.N.I.	4,000
Total	15,858
Overall Total	25,160

¹The material in this section comes from: Comitato dei Ministri per il Mezzogiorno, Relazione sull'Attuazione del Piano di Coordinamento degli Interventi Pubblici nel Mezzogiorno (Roma: Istituto Poligrafico dello Stato, 1969), 14-95. Also, Lutz, Italy - A Study . . ., 268-284; "I.R.I.: Ragbag or Show Case?" The Economist (February 15, 1964), p. 641; "I.R.I. Bashes On," The Economist (September 9, 1967), p. 917; "Italy's I.R.I.: How Good a Formula," The Economist (October 7, 1967), pp. 60-61.

Thus, over the period considered, the South received in aid over 25 billion dollars, from all sources. This is an incredibly large amount. It exceeds the total amount of taxes that the central government raised in the South from 1951 to 1968 by over 40%; it represents over 15% of the sum of the combined N.N.P. of the South from 1951 to 1968.¹ Few, if any, underdeveloped nations or regions have received, or can expect to receive, a comparably huge amount of aid. Only a very small fraction of the funds invested by I.R.I. and E.N.I. were borrowed in the South; the rest came out of profits, borrowings in the North, and grants by the government out of tax money. Similarly, the industrial loans made by the special credit institutes in the South were borrowed mostly from the North and only a very small fraction from the South.² Thus the South received an amount of aid from the North (from tax money and borrowing) which ranged from 22 to 33 billion dollars. Of this, over 19 billion dollars came directly from taxes raised in the North (over 9 billion dollars through the fiscal system and the rest to carry out the land reform in the South, to finance the Cassa, for interest subsidization to industrial loans made in the South by the special credit institutes, and by the government grants--of unknown amounts--to I.R.I. and E.N.I.

¹The N.N.P. of the South (in millions of dollars, at 1963 prices) have been obtained from : ISTAT, I Conti Economici Nazionali e Territoriali dell'Italia, p. 25.

²La Cassa per il Mezzogiorno, La Cassa per il Mezzogiorno, p. 96.

for the purpose of making industrial investments in the South). Of course, a great deal of this money went to subsidize consumption in the South. The effectiveness of the rest to stimulate the development of the South will be evaluated in the next section.

Evaluation of the Development Program

In this part, the development program will be evaluated, first in its component parts, and then from an overall point of view. In the next part, the policy suggestions stemming directly from this dissertation will be presented.

In general, it can be said that the land reform did not succeed in remedying the ills of Southern agriculture. The 2.1 hectares of land distributed to each farmer was too small to provide a decent standard of living¹ and did not justify the introduction of farm machinery. There is, in fact, evidence that the fractionalization of large estates resulted in increased costs of production, hence efficiency considerations alone would have argued against such a fractionalization.² In addition, the hoped-for change to crops

¹It was estimated that from 3 to 4 hectares of land were needed to provide a standard of living to the Southern farmers comparable to that in the North. Lutz, Italy - A Study . . ., p. 184.

²The frequently repeated complaint is that what really motivated the land reform was not national, socio-economic planning but an effort on the part of the Democratic Party (the party in power) to win votes away from the Communists. "Italy's Green Revolution," The Economist (July 16, 1966), pp. 278-79.

more suitable to the soil of the South did not materialize, and the few farmers' cooperatives that were set up were not very efficient: cooperation hardly seems to suit the Italian character.¹ As a result the plan failed to bring about a major structural change in the economy of the South. My feeling is that the stated objectives of the plan were, to a large extent, only a cover up for what was essentially a relief program, directed more towards the alleviation of misery than its economic development. If this was in fact the case, scarce resources were wasted on humanitarian but otherwise unproductive ways, thus offering no hope of providing lasting improvements in Southern agriculture.

Better results were achieved by the Cassa. First of all, the very fact that the development of the South was not entrusted to the inefficient and incapable traditional bureaucracy is in itself an achievement. In fact, the establishment of the Cassa represented a break with some of the cardinal principles of Italian public administration in the sense that it was not limited to a single functional sector and not restricted to or governed by an annual budget. Thus the Cassa was able to act speedily and efficiently since it was empowered to override the legal and administrative boundaries on both the local and the national level and to plan for the areas as a whole. Secondly, the Cassa decided to concentrate its efforts on a limited number of

¹"Italy's Green Revolution," The Economist (July 16, 1966), pp. 278-79.

areas which offered the greatest development potential from the viewpoint of agriculture and industry, rather than to spread its efforts on as wide a geographical area as possible. I think that the avoidance of such a diffusion and dispersion of effort was an economically rational decision. Thirdly, the Cassa recognized that before industrialization could occur, infrastructures would have to be provided and agricultural production would have to be increased. In view of this it concentrated its efforts in such areas from 1951 to 1957. There is, however, some evidence that in the early 1950's, planners believed that their function was only to provide social overhead capital and to improve agriculture, and that the market would take care of the rest. They thought that these steps would be sufficient to attract private investments and spur the industrial development of the region. Thus they failed to realize, as Hirschman points out, that the provision of infrastructures would permit development but not compel it.¹ Had the Cassa realized this in 1951, it would probably have chosen to spend its funds differently and perhaps more efficiently. Another criticism levied against the Cassa is that so little of its resources (about 220 million dollars or only 4% of the total) were spent on vocational training. It is often said that some of the roads constructed in the early 1950's could have been postponed, thus realizing resources for training programs (this criticism will be answered later). To

¹Hirschman, The Strategy . . ., p. 89.

summarize and conclude on the work of the Cassa, it can be said that there have been mistakes and waste, but the Cassa has become an internationally known example of efficiency, integrity, and honesty (which, by the way, is admitted also by its sharpest critics).¹

The special credit institutes, granting low-interest loans to Southern industrial ventures, performed an excellent job. They processed loan applications with expediency and were able to satisfy over 70% of the loans requested through 1968, for a total of almost 2 billion dollars.²

The operation of I.R.I. and E.N.I. in the South is marked by many successes: they successfully by-passed the inefficient traditional government bureaucracy and brought about important changes in the economy of the South; the directors and managers of the state-owned corporations have proved to be men of great integrity and honesty and entrepreneurs of a high caliber, and they have invested in efficient and competitive operations; therefore waste of resources has been held to a minimum. There is, however, an area of great controversy with regard to their investment practices in the South. Both I.R.I. and E.N.I. have concentrated their investments in very capital intensive activities (steel, petro-chemicals, shipbuilding, etc.), which created relatively few industrial jobs in relation to the

¹"Planning to Plan," The Economist (March 18, 1967), pp. 35-36.

²La Cassa per il Mezzogiorno, Bilancio 1968, pp. 294-346.

large sums invested in the South. The reason for concentrating on very k-intensive investments may have resulted, at least in part, from the necessity to abide by the government regulation which required 60% of their new investments to take place in the South. Whether smaller and more L-intensive private companies would settle around K-intensive, raw-material producing industrial complexes created by I.R.I. and E.N.I. in the South was the real test of the effectiveness of this development strategy and will be examined next.

Perhaps the most serious criticism of the Southern development program, from an overall point of view, is the complete lack of coordination among its component parts and between it and the various ministries and local governments affected. The state had in fact delegated to a number of semi-autonomous temporary agencies a major problem of socio-economic change without providing sufficient coordination on the national level among the various agencies and between these agencies and the national and local administrative units. Thus the land reform was carried out without any coordination whatsoever with the effort of the Cassa; the special credit agencies proceeded in complete independence from the land reform and the Cassa, and so did I.R.I. and E.N.I., as far as their Southern investments were concerned. In addition, all of them were in constant friction with other governmental administrative units. Needless to say, this state of affair led to waste, duplication, frustration,

and misunderstanding. For example, the land reform, by breaking down large estates and distributing the land to farmers who worked the land themselves, eliminated the jobs of many farm laborers. This did not disturb the land reform agency since it felt that it was the job of the Cassa to create enough industrial jobs to absorb these displaced farm laborers. But a little consultation with the Cassa would have made it clear that it was impossible to create enough industrial jobs to absorb all these displaced farm hands. Had a coordinated effort been undertaken, this would have become evident so that either the land reform could have been postponed or provision could have been made for an orderly and immediate emigration of the resulting surplus labor. As it was, farm laborers swelled the ranks of the unemployed and only after a long delay emigrated (meanwhile, they received unemployment benefits thus imposing a burden on the economy of the South which, with more coordination, would not have materialized). Another example of lack of coordination occurred when many local authorities refused to take formal jurisdiction over public works (completed by Cassa) such as aqueducts in order to avoid the cost of maintenance.¹ Examples such as these could be multiplied. They arose exclusively because of lack of coordination.

¹"Planning to Plan," The Economist (March 18, 1967), pp. 35-36.

Il Comitato dei Ministri per il Mezzogiorno completely failed in its responsibility to coordinate the Southern development effort. The Vanoni Plan (1954-1964) which was supposed to coordinate all these various efforts was never activated,¹ and the Five-Year Development Plan (1967-1971) is nothing else than a series of macroeconomic projections without any instrument for its implementation.² In all fairness, it must be said that the absence of a "good" and detailed plan is due not so much to inability to draw it up, as to the general reluctance on the part of the Democratic Party to engage in large scale economic planning. The apathy that Italians have for planning is suggested by their current tendency to speak of "economic programming," rather than planning.³ Nevertheless, the piecemeal, half-hearted, and completely uncoordinated efforts of the past two decades must be replaced by a carefully formulated and executed overall development plan--if the mistakes of the past are to be avoided and the best use be made of available developmental resources.⁴

¹G. Hildebrand, Growth and Structure in the Economy of Modern Italy (Cambridge: Harvard Press, 1965), pp. 60-62. And B. Higgins, Economic Development (New York: Norton, 1959), pp. 751-60.

²J. La Palombara, Italy: The Politics of Planning (Syracuse: Syracuse University Press, 1966), p. 150. And "Planning to Plan," The Economist (March 18, 1967), pp. 35-36.

³La Palombara, p. 2. It is impossible, for lack of space, to discuss these plans.

⁴To be noted is that SVIMEZ is not a planning agency.

The second major criticism of the development program for the South is that such a great portion of the resources used up went to relieve poverty rather than for expressly developmental purposes. This is a very short-sighted view since it postpones the time when growth will become self-sustaining in the South, and the North may be unwilling to shoulder such a large burden for much longer--if better account is not made of the aid which it now extends to the South.

Finally, the stated aim of the development program in 1951 was to eliminate the North-South gap in the real per capita income, by 1965. Now, even a most elementary calculation should have made clear how impossible it would have been to achieve this aim. In 1951, real per capita income in the North was roughly twice that in the South (see Table 6, Chapter I). Since it was (realistically) assumed that per capita income (in real terms) in the North would grow at a rate of 5% per year, for Southern real per capita income to reach that of the North in 1965, the latter would have had to have grown at a rate of 10% per year on the average, for 15 years. This is an unheard of, and completely unrealistic rate of growth to expect.

New Policy Suggestions

I will now turn to examine the many new and important policy suggestions that stem directly from this dissertation.

Perhaps the most important of these new policy suggestions is the great necessity to introduce birth control in the South. As the following table shows, the birth rate in the South (defined as the number of births per 1000 people) is almost twice that of the North and is declining very slowly.¹

TABLE 37

BIRTH RATE IN THE NORTH AND IN THE SOUTH, 1950 AND 1962
(Number of Births per 1000 Inhabitants)

Year	North	South
1950	14	24
1962	12	23

Source: Italian Affairs: Notes and Documents, 1951 and 1962.

To wait for the birth rate of the South to fall to much lower and acceptable levels (say, to the level prevailing in the North), as a natural by-product of development, might take several decades. Meanwhile, the South would continue to go on to raise millions of people for export.² The remittances which these emigrants would send

¹The death rate is approximately the same in both the North and the South. See: Annuario Statistico Italiano, 1969 (Roma: ISTAT, 1970), pp. 36-37.

²As the experience of the past 20 years clearly indicates, it is unrealistic to hope that future employment opportunities in the South would open up to absorb even a majority of the new entrants into the labor force--if the birth rate of the South is not sharply reduced.

back to the South, once they emigrate, do not justify the great cost incurred in raising them.¹ Professor Antonio Giannone of the University of Rome estimated that to raise a skilled worker to age 25, cost 9,000 dollars (at 1963 prices) in 1951.² Of course, as shown in Chapter III, most Southern emigrants in the past were unskilled, but with the educational improvements now taking place in the South, it is likely that the future emigrants will have skills at least comparable to what was considered skilled labor in 1951, and so the cost of raising them may not be lower than 9,000 dollars. In fact, M. Talamo estimated that to raise an Italian worker with "average" skill cost about 13,000

¹The technique used to measure the amount of human capital embodied in a worker is by now well known. The best works on the subject are: Alfred Conrad and John Meyers, The Economics of Slavery (Chicago: Aldine Publishing Company, 1964), particularly pp. 43-114; Gary Becker, Human Capital (New York: N.B.E.R., 1964), especially pp. 37-68; and Burton Weisbrod, "The Valuation of Human Capital," The Journal of Political Economy, October 1961, pp. 425-36. Pioneering work along these lines had been done by Professor Corrado Gini. See his: "Apparent and Real Causes of American Prosperity," Banca Nazionale del Lavoro, Quarterly Review, July 1948, pp. 351-64.

²Antonio Giannone, Spese di Produzione e Reddito Nazionale (Roma: Società Italiana di Statistica, 1957), pp. 1-40. And Antonio Giannone, Ulteriori Considerazioni a Proposito di Spese di Produzione e Reddito Nazionale (Roma: Società Statistica Italiana, 1958), pp. 1-28. The actual value of 9,000 dollars was obtained by multiplying the figure given by Giannone (on p. 33 of the latter volume) by the price index (so as to express it in terms of 1963 prices) and dividing the resulting figure by 625 so as to express it in terms of dollars. These two volumes, being out of print and available only at the University of Rome (which was closed during my trip to Italy) have been kindly provided for me by the author.

dollars (at 1963 prices) in 1961.¹ Table 38 gives an estimate prepared by CENSIS (Center for the Study of Social Investments) of the cost of providing for the various educational levels (excluding the cost of subsistence, health expenditures, etc.) for a pupil in Italy, in 1961.

TABLE 38
COST OF EDUCATION EXPENDITURES PER PUPIL, IN 1961
(In 1963 Dollars)

Elementary Education	3,040
High School Education	2,080
College Education	4,800
University Education	4,640
Total	14,620

Source: CENSIS, Costi e Ricavi dell'Istruzione
(Roma: CENSIS, 1966), pp. 50-51.

Clearly, the remittances sent back by emigrants cover only a minor part of the cost incurred in rearing and educating them.² In short, as a long-run policy, large scale emigration is an irrational and very costly way of

¹M. Talamo, "Sul Valore Monetario del Capitale Umano e Sue Applicazioni alle Misure della Produttività," appearing in Annali di Statistica, Anno 94, Serie VIII, 15, 179-213, published by ISTAT, in 1965.

²Nor is it relevant (though true) to say that most of the cost of raising and educating these people is at present incurred by the North (through transfers via the fiscal system), since the North may not tolerate this situation much longer; but what is even much more important is that these same resources could be used for truly developmental purposes in the South rather than being spent (as they are now) on raising people for export.

getting rid of surplus population.¹ Of course, as pointed out earlier, once this excess population has come into existence, no matter how much has been spent to raise them, it is better for them and for the economy of the South that they emigrate (if they remain, they only consume; by emigrating, they release their consumption, they make possible beneficial structural changes in the economy of the South, and they send back remittances). So what has been argued here is not to prevent emigration but to sufficiently reduce the birth rate of the South so as to make that emigration unnecessary.²

If it is then pointed out that the Catholic Church is against birth control, it must be remembered that it had also bitterly objected to the legalization of divorce in Italy and yet divorce is about to become law.³ And the

¹To say nothing of the human suffering and anguish endured by the emigrants themselves having to leave country, family, friends, and their accustomed way of life.

²The saving accruing to the economy of an already overpopulated nation (with particular reference to India) has been fully explored by Stephen Enke in three articles: "The Gains to India from Population Control," Review of Economics and Statistics, May 1960, pp. 175-81; "The Economics of Government Payments to Limit Population," Economic Development and Cultural Change, July 1960, pp. 339-48; and "The Economic Aspects of Slowing Down Population Growth," The Economic Journal, March 1966, pp. 44-56.

³To be sure not only the Church opposes birth control, but there is still on the books a Fascist-era law prohibiting the spread of birth control information. However, the constitutionality of this law is now being reviewed by the Italian Supreme Court. In fact, this law has never been applied and birth control material is readily purchaseable in any pharmacy in Italy. Also a birth-control clinic

desire and willingness to reduce births in the South is very strongly felt and only awaits a program directed at educating the masses on how to do so.¹ (Instruction on how to practice the rhythm and free distribution of condoms by a government agency to males applying for a marriage license, on a voluntary basis, is all that may be needed to reduce the birth rate in the South to a level closer to that of the North. These two methods--but without government intervention--are in fact the ones which are overwhelmingly responsible for the present low birthrate in the North.) Now if there were no practical remedy to reduce the birthrate, if people were unwilling (even if capable) to reduce births,

dispensing more sophisticated birth control material to all (married and unmarried) just opened up in the heart of Rome, with police knowledge but no police interference. ("Birth-Curb Clinic Surfaces in Italy," The New York Times, May 13, 1969, p. 9.

¹This statement is based on the author's knowledge of Southern Italy. On the many trips taken, the question was asked to literally hundreds of persons: "Why do you have so many children?" The answer invariably was: "They just come." If they were then asked if they were willing to have fewer children if they were taught how, the answer was almost always yes. Indeed, a recent study showed the startling conclusion that even in the U.S., where birth control information is so readily available and people are so much more educated on ways to avoid pregnancies, 35 to 45% of all births were unwanted! ("Unwanted Births Found High in U.S.," The New York Times, October 29, 1969, p. 25.) In Southern Italy the percentage of unwanted births may be even higher. If it is then inquired as to why the government has not spread birth control information, the answer is lack of political will, wanting to avoid more controversy with the Church, but above all because the excess population could emigrate. What is being overlooked, of course, is the great cost of raising people for export.

or if the task were so overwhelming as it is for example in India, then emigration (if possible) might be the only way to reduce both the short-run and the long-run population pressure. But this, clearly, is not the case of the Italian South. Admittedly, a policy of reducing the future population pressure not by emigration but by sharply reducing the birthrate of the South might take as long as 5 years or more to become fully operative. But without such a policy, it might take decades to reduce the birthrate to acceptable levels; meanwhile, tremendous waste of economic resources would be incurred in rearing an excess number of people only to see them emigrate.

Another suggestion flowing from this dissertation is the tremendous need to recognize Southern agriculture among more rational lines. As pointed out in Chapter III, emigration so far has been completely helpful to the South since it represented entirely redundant labor. Relieving population pressure was thus a necessary (though not a sufficient) condition for improving Southern agriculture. However, were the opportunity to reorganize agriculture (made possible by the reduction of the population pressure that plagued it since the time of unification) now to be missed, a time may soon come when even good agricultural land will be abandoned. Agricultural pursuits might be so discredited in the mind of Southerners as to prefer emigration to take industrial jobs, rather than take up equally rewarding agricultural pursuits--and this in a nation faced

with huge and increasing food and raw material imports.

This dissertation also pointed out (and gave a rough quantitative estimate) of the dynamic Backwash Effect resulting in the South from the discouragement to the setting up in the South of new industrial ventures and the expansion of already existing ones because of the competition of already established and efficient Northern firms. I think this is a very promising area for increasing the industrialization of the South. It is true that the Cassa is already providing a battery of incentives to new industrial investments in the South. However, to the amazement of all, when an evaluation was undertaken of the total benefit flowing from the entire package of incentives provided by the Cassa, it turned out to be equivalent to an import tariff of only 3-7%.¹ This is hardly significant as an inducement to the setting up of new industrial ventures (and the expansion of existing ones) in the South, especially when compared to the protection which other underdeveloped nations provide for their infant industries.² A useful line of approach

¹Pasquale Saraceno, "La Politica di Sviluppo di un'Area Sottosviluppata nell'Esperienza Italiana," appearing in: SVIMEZ, Il Mezzogiorno nelle Ricerche della SVIMEZ (Roma: Giuffrè, 1968), pp. 709-758. Similar results were obtained by: Gardner Ackley and Lamberto Dini, "Tax and Credit Aids to Industrial Development in Southern Italy," Banca Nazionale del Lavoro, Quarterly Review, December 1959, pp. 339-68. The results of these studies amazed economists because, as mentioned earlier, the incentives offered by Cassa were so many. But they were so intricate that they managed to confuse everyone.

²From a strictly economic point of view it may make

would be to provide for much higher temporary across-the-board subsidies to new industrial ventures in the South.¹ The work done in Chapter VI of this dissertation would then give a rough indication as to the benefits which can reasonably be expected to result in the South from such a policy.

Related to what has just been said is a point which has created a great deal of controversy among economists and is related to the type of industrial investments to be undertaken in the South. It has been argued by some economists² that in a poor nation or region, faced with surplus labor, emphasis should be placed on L-intensive, rather than on K-intensive methods of production so as to maximize industrial employment. As it stands, this argument would favor the using of L-intensive methods even when, given the relative factor prices in the area, K-intensive methods of production would be more efficient. This, however, would result in inefficient industries which would require continued subsidies and clearly would not solve the long-run

no sense to develop the South. If that were indeed the case, a policy of increasing subsidies to industrial undertakings in the South would be justified only on political grounds (i.e., given the political commitment to develop the South) not on economic grounds. (See the discussion relating to regional theory of Chapter I.)

¹Subsidies are more efficient than tariffs (the theoretical arguments are well known); they should be temporary so as not to create permanent infants; and they should be applied across the board so that industries would set up rationally--on the basis of comparative advantage.

²W. A. Lewis, Development Planning (New York: Harper and Row, 1966), pp. 55-68.

problems of the South. What can be inferred from this dissertation is that as long as emigration is possible, it should be the aim of the development authorities to maximize efficiency rather than employment, even if this required K-intensive methods. Unemployed workers would then have to emigrate. It is this line of approach that offers some hope of narrowing the North-South gap. An argument which could, to some extent, reconcile efficiency and employment considerations is that, given the relative factor prices prevailing in the South, and using the most efficient techniques of production, those industries which are more L-intensive should be preferred to equally efficient but more K-intensive industries, so as to absorb more people into industrial employment. This argument is more worthy of consideration (than the one stressing L-intensive methods even if less efficient than available K-intensive methods of production). However, even if better, this line of thought is based upon a static analysis; i.e., it is based on existing relative factor prices rather than on the dynamic process of increasing labor productivity and thus increasing real per capita income. Development involves the changing of existing conditions rather than adaptation to them. Viewed in this light, the competitive K-intensive investments made in the South by I.R.I. and E.N.I. are fully justified, even if they created relatively few jobs.

The fourth policy suggestion stemming from this dissertation refers to the need for more technical training in the South. It is often alleged that in order for the South to develop it needs more technical personnel.¹ However, as was shown in Chapter III, there seems to be at present no shortage of technical skills in the South. Indeed, there is some evidence that when investment opportunities exist, there is not even a shortage of entrepreneurship.² What is missing, and thus holding back the development of the South, is lack of sufficiently rewarding investment opportunities in the South. It is here that increased subsidies to industrial investments in the South (mentioned earlier) can make a major contribution. As for the need of more technical personnel in the South, the lack of a shortage of them at present does not, of course, assure that such a lack may not arise in the future. But

¹SVIMEZ, Mutamenti della Struttura Professionale e Ruolo della Scuola (Roma: Giuffrè, 1961), pp. 1-99. And SVIMEZ, Trasformazioni Sociali e Culturali in Italia e Loro Riflessi sulle Scuole (Roma: Giuffrè, 1962), pp. 1-78.

²In the designated Southern "industrial zones" where infrastructures have been provided, a sufficient number of local entrepreneurs has been quick to seize on to the new investment opportunities thus opened up. See: Salvatore Cafiero e Alessandro Pizzorno, "Sviluppo Industriale e Imprenditori Locali," published in Il Mezzogiorno nelle Ricerche della Svimez, pp. 523-52. Also Salvatore Cafiero, Le Migrazioni Meridionali, pp. 47-76. These works consider explicitly and empirically the industrial zones of Latina, Pescara, and Siracusa. Sometimes, discussion in the literature stressing the alleged lack of entrepreneurial spirit in the South goes on as if entrepreneurship is essential in all members or at least in a large fraction of the labor force. This is completely misleading. Only a very small fraction of the population possessing this special type of

what is important here is that there be coordination between the new industrial skill requirements likely to arise when the subsidies to industrial developments in the South begin to bear fruits, and the training of new technicians for these jobs. Without such a coordination, the new technicians turned out might prove to have the wrong skills or as in the past might come into existence before job opportunities for them arise so that they too would emigrate, after the South incurred most of the cost of training them. So just providing more technicians without the type of coordination mentioned above is likely to prove very wasteful and would have little effect on stimulating the industrialization of the South.

The last major policy suggestion flowing from this dissertation refers to the need for a particular brand of educational reform in the South. The problem is not simply to have more technicians but goes deeper than that and is more fundamental. Indeed, it starts with elementary and junior high school education. Elementary and junior high school education in the South, even today, not only stresses liberal arts subjects (grammar, language, history, literature, etc.) almost to the complete exclusion of more technical subjects (mathematics, physics, chemistry, etc.) but in a more subtle, yet unmistakable way, instils in the

skill is needed and I am sure that given the economic opportunity--which was clearly absent in the past--a sufficient number of local entrepreneurs will spring up in the South. The two empirical works mentioned above seem to justify this belief.

youngsters, in these tremendously important formative years, a contempt for technical and vocational training, indeed for the entire materialistic society of the North (and of the developed world). No wonder so many of them shy away from the sciences to major in law, literature, history. They do so even knowing that they will probably be unable to find jobs in these fields upon graduating. Their aim: obtain a degree and the honor that goes with it (even if they will never find work). No wonder, also, Southerners stubbornly refuse to understand--to even consider the benefits of the civilization of the North--except for its higher per capita incomes. Yes, there are still two Italies, one living in the twentieth century, the other still in the nineteenth century.

A major massive effort must be undertaken in the schools (from the earliest grades) and on the mass media to explain to Southerners what modern civilization is all about. Only by doing this will Italy be "unified" and the South develop by its own internal momentum.

It has been remarked that Italy is a modern nation with the administration of an underdeveloped one.¹ The reason is not hard to understand: public administration in Italy is mostly in the lands of Southerners!

To go from Milan to Palermo is to visit two completely different worlds; to go from Rome to Naples

¹"Emerging State: Reform and Red Tape," The Economist (March 18, 1967), pp. 39-42.

(less than two hours by train) is an unforgettable experience.

Economic Changes in the South and
in the North, 1951-1967

The changes that have taken place in the South from 1951 to 1967,¹ both in absolute terms and in relation to the changes that took place in the North during the same period of time can be analyzed by comparing the figures of Tables 4, 5, and 6 (in Chapter I, which refer to the year 1951), with those of Tables 39, 40, and 41 (that follow, and which present the 1967 data). The tables are very clear, so that the commentary will be held to a minimum. First the changes in the North will be considered, then the changes in the South in relation to those in the North will be examined.

Looking at Tables 4 and 39, it can be seen that from 1951 to 1967, the population of the South has increased by about 1.5 million people, even in the face of an emigration of over 4 million persons (to the North and to other nations). Its labor force has declined by about 400,000 workers, and its ratio of employed to present population declined from .37 in 1951 to .32 in 1967. This occurred because the proportion of workers among Southern emigrants

¹Complete figures for 1968 and 1969 are not yet available. Also, if the average figures for the years 1951-1953 are compared with those for 1965-1967 (in order to smooth out cyclical effects), the results do not vary, since 1951 and 1967 were neither years of (more than average) inflation, nor years of recession.

was greater than for the population as a whole and because labor participation declined, in general, in Italy.

The agricultural labor force fell by 1.5 million units, from 3.7 million in 1951 to 2.2 million in 1967. This 50% reduction in the number of the Southern agricultural workers was due to emigration to other nations, to other parts of the South to take up non-agricultural employment, to the North (to a minor extent), and from attrition. So that while 57% of the labor force of the South was engaged in agriculture in 1951, this percentage had fallen to 35%. Industrial employment rose by about 600,000, or from 20% to 31% of the total employed labor force of the South.¹ Other employment rose by about 500,000, so that in 1967 it represented 34% of the total employed labor force of the South, up from 23% in 1951. The previous figures thus show that in the sixteen years considered, a major and mostly beneficial structural change took place in the economy of the South.

From Tables 5 and 40, it can be seen that the agricultural output of the South fell from 31% to 23% of the total value of all Southern output (at factor cost); industrial output rose from 19% to 29%, while the output of the other sectors (service and public administration) remained almost unchanged at about 48-49% of the total.

¹This increase is by no means insignificant, but was not larger because of the stress put in the South on industrial investments of a K-intensive type.

Again the major shift in relative importance was from agriculture to industry.

More significant to evaluate the changes that have taken place in the South are the per capita figures (Tables 6 and 41). Agricultural output (at factor cost) per person employed in that sector jumped from 476 dollars in 1951 to 1,212 dollars in 1967,¹ or by about 87%.² In industry, per capita output (at factor cost) increased from 827 dollars to 1,731 dollars, or by 71%. In services, the corresponding figures are: 1,406 dollars, 2,511 dollars, and 56%; while in public administration: 3,042 dollars, 3,126 dollars, and 3%.³

The overall per capita output (expressed in terms of 1963 market prices) per person living in the South increased from 334 dollars in 1951 to 645 dollars in 1967. This represents a 63% increase for the entire period, or an average of 4% per year. This is a very high rate of growth for any underdeveloped country or region. The

¹These and all subsequent figures are expressed in terms of 1963 prices.

²As already pointed out, most of the phenomenal growth in per capita agricultural output of the South was due to emigration of surplus agricultural labor, rather than to expansion of the total farm output.

³In public administration, output is measured by salaries paid. Thus the higher output per capita in public administration is only a reflection of the relatively higher incomes of public servants, than of higher productivity in a physical sense.

TABLE 39

POPULATION PRESENT, EMPLOYED POPULATION, AND SECTORAL DISTRIBUTION
OF THE LABOR FORCE, IN THE NORTH AND THE SOUTH, IN 1967

	(1) North	(2) South	(3) Italy	Ratio of (2)÷(3) (Per Cent)
A. Population				
1. Population Present ('000)	33,435	18,964	52,409	36.2
2. Employed Population ('000)	13,282	6,101	19,383	31.5
3. Ratio of (2)÷(1), (Per Cent)	39.4	32.3	37.0
B. Sectoral Distribution of Employed Population ('000)				
1. Agriculture	2,403	2,153	4,556	47.3
2. Industry	5,893	1,889	7,782	24.3
3. Service	3,892	1,494	5,386	27.9
4. Public Administration	1,094	565	1,659	34.0
C. Sectoral Distribution of Employed Population (Per Cent)				
1. Agriculture	18.1	35.2	23.2
2. Industry	44.3	31.0	40.2
3. Service	29.3	24.6	28.0
4. Public Administration	8.3	9.2	8.6
Total	100.0	100.0	100.0	

Source: For A.1: Rilevazione Nazionale delle Forze di Lavoro, 11 Ottobre 1968 (Roma: ISTAT, 1969), pp. 53-56.
Rest: ISTAT, I Conti Economici Nazionali dell'Italia, 1965-67, Supplemento Straordinario al Bollettino Mensile di Statistica, N.7, Luglio 1968, 49.

TABLE 40

NET REGIONAL AND SECTORAL OUTPUT, IN 1967

	(1) North	(2) South	(3) Italy	Ratio of (2)÷(3) (Per Cent)
A. Net Regional and Sectoral Output, at 1963 Prices, in Millions of Dollars				
1. Regional Output (at Market Prices)	40,107	12,231	52,338	23.4
2. Agricultural Output at Factor Cost	3,490	2,610	6,100	42.8
3. Industrial Output "	15,718	3,270	18,988	17.3
4. Output of Service Sector "	11,691	3,731	15,422	24.2
5. Output of Public Admin. "	3,325	1,766	5,091	34.7
6. Regional Output "	34,224	11,377	45,601	24.9
B. Sectoral Output, at 1963 Prices (Per Cent)				
1. Agriculture	10.2	22.9	13.4
2. Industry	45.9	28.8	41.6
3. Services	34.2	32.8	33.8
4. Public Administration	9.7	15.5	11.2
Total	100.0	100.0	100.0	
C. Net Regional "Income"* at 1963 Market Prices, in Millions of Dollars				
	32,507	13,454	45,961	

*Regional Income is here defined as Net Regional Output at Market Prices plus Transfers from outside.

Source: Elaborated from: ISTAT, I Conti Economici Nazionali e Territoriali dell'Italia, 1965-67, Supplemento Straordinario al Bollettino Mensile di Statistica, N. 7 (Luglio 1968), 8-9, 18, 29, 30-1, 46.

TABLE 41

INDICATORS OF ECONOMIC DISPARITY BETWEEN THE SOUTH AND THE NORTH IN 1967:
NET OUTPUT PER PERSON PRESENT AND PER WORKING PERSON

	(1) North	(2) South	(3) Italy	Ratio of (2)÷(3) (Per Cent)	Ratio of (2)÷(1) (Per Cent)
A. Net Sectoral Output, Per Person Working in Sector, at Factor Cost, in 1963 Dollars					
1. Agriculture	1,452	1,212	1,339	90.5	83.5
2. Industry	2,667	1,731	2,400	76.3	64.9
3. Services	3,004	2,511	2,863	87.7	83.2
4. Public Administration	3,040	3,126	3,069	101.9	102.8
B. Net Output and "Income," at 1963 <u>Market</u> Prices, in Dollars					
1. Regional Output Per Person Present	1,200	645	980	65.8	54.2
2. Regional Output Per Person Employed	3,200	2,005	2,700	74.3	62.7
3. Regional Income Per Person Present	972	709	877	80.8	72.9

Source: Elaborated on Tables 39 and 40.

regional output per employed person increased from 897 dollars in 1951 to 2,005 dollars in 1967, or by 76%. The regional "income,"¹ per person present in the South, rose from 399 dollars in 1951 to 709 dollars in 1967, or by 56%. Thus the real per capita transfers from North to South remained at about the same real dollar value (64-65 dollars) per person living in the South in 1951 (399-344; Table 6, column 2) and in 1967 (709-645; Table 41, column 2).²

What comes out of all this is that, in an absolute sense, the South made great strides from 1951 to 1967: there was a great change in the structure of its economy which made it more similar to those of already developed countries, and its real per capita output increased at the fairly high average rate of 4% per year. These favorable developments were made possible by the beneficial operation of the unhampered operation of the market mechanism, by the government aid to the South, and by the few endogenous growth factors present in the South itself. It is of course impossible to determine exactly how much of the total change that occurred in the South from 1951 to 1967 is the result

¹It includes the per capita output of the South plus the per capita transfers from the North.

²The figures for Italy as a whole show that in 1951 the regional "income," per person present, is slightly larger than the regional output per person present (480 and 477, respectively; see Table 6, column 3) reflecting the foreign aid that Italy was then receiving. In 1967 the situation is reversed, as a reflection of the foreign aid given by Italy.

of the operation of each of these three different factors. One thing is certain: spontaneous or endogenous factors must have played only a minor role in the growth that took place in the South over the period considered. Most of the structural change that occurred must have been the result of the unhampered operation of the market mechanism (particularly through the emigration of redundant Southern labor), while most of the industrialization (the large-scale, technologically-advanced, K-intensive investments of I.R.I. and E.N.I.) and a great deal of the public consumption and of the increase in per capita "incomes" of the South must have resulted directly from the government aid to the South (the development program and the transfers through the fiscal system).

If the development that occurred in the South from 1951 to 1967 is now compared to the growth that took place in the North over the same period (see the last columns of Tables 6 and 41), it can be seen that the South lost ground: North-South inequalities have generally increased, so that the already great gap that existed between these two regions in 1951 actually widened by 1967. Thus, the overall net regional output, at 1963 market prices, per person living in the South, fell from 59.7% of that of the North in 1951, to 54.2% in 1967. In terms of output per person employed, the Southern figure also declined in relation to the Northern one: from 71.0% to 62.7%. The regional income,

per person present in the South, in the relation to the Northern figure, fell but only by very little (73.1 in 1951, to 72.9 in 1967).

In agriculture, the net sectoral output per person, at factor cost, at 1963 prices, fell in the South from 87.8% of that of the North in 1951, to 83.5% in 1967; in industry, from 78.7% to 64.9%; in the service sector, it rose from 81.1% to 83.2% and in public administration it also rose from 101.9% to 102.8%.¹

Thus to conclude, the South has developed very fast but the North has grown even faster--result: a widened regional gap. This does not mean that the South has necessarily failed. There are two yardsticks for measuring success or failure in this case, and the two must be kept separate: one is to compare the average yearly rate of growth in the real per capita income of the South to the general performance of other underdeveloped countries or regions. In this respect, the performance of the South must be regarded as a success--but not an unqualified success: few, if any, other nations or regions of the world

¹The reason why the net output per person in public administration in the South rose relative to that of the North (and was actually higher in an absolute level) is due to the fact that the South, because of its large development program (which started in 1950-1951, and was expanded since then), employs a greater relative share than the North, of the more highly skilled (and therefore more highly paid) government employees needed to administer the development program. During this period, the salaries of civil servants performing the same type of work were equalized between the North and the South.

are in the enviable position of receiving so much development aid (both absolutely and in relation to their respective or net national products) as the South received from the North, and of having the possibility open to relieve population pressure by mass emigration. The other test of the performance of the South is to see if it has succeeded in narrowing its gap with the North so as to look forward to an eventual national economic unification. In this, as it was seen, the South failed. It is, however, a failure with a happy note. The North, even with the huge amount of aid which has been extending to the South, has been growing at such a fantastic rate as to propel the Italian national growth rate to a level which is higher than that of most other large industrial nations of the world.¹ Clearly, the economy of the North has nothing to envy to the economies of the most advanced western European nations. The happy note in the Southern failure is that with the North growing so fast, the latter can absorb ever more redundant Southern labor,² it can increase the amount of government aid extended to the South, and it can, by its sheer material success, point the way and finally convince

¹G. Meier, Leading Issues in Development Economics (New York: Oxford University Press, 1964), p. 8 (for figures for the years 1950-1959); and The New York Times, March 4, 1969, p. 60 (for figures for the years 1958-1967).

²This, as already pointed out, is a necessary condition for Southern development. But for that to take place, a reorganization of Southern production along more rational lines is also essential.

a new generation of Southerners of the benefits of development (not only material, but if sufficiently "enlightened," even moral--more education, less superstition, more human dignity, etc.). It is in this latter direction that the hopes and challenges are greatest.

CHAPTER VIII

CONCLUSION

In this chapter the main conclusions reached will be summarized and the major policy suggestions stemming from this dissertation will be reiterated.

Conclusions Reached

The main conclusions reached in this dissertation are the following:

(1) From the analysis and the measurements conducted in Chapters III, IV, V and VI, it can be concluded that for the years 1952 to 1957 there was a net Backwash Effect on the South, while from 1958 to 1967 there was a net Spread Effect. If the entire period (1952-1967) is taken as a whole, there was a net Spread Effect on the South of about 47 dollars per capita (at 1963 prices). This represented about 16% of the 300-dollar increase in the net real per capita output that occurred in the South from 1952 to 1967. Thus the free and unhampered operation of the market mechanism benefited the Italian South in the post-war period.

(2) The emigration of workers (and of people in general) out of the South and to the North does not seem to have caused a Backwash Effect on the South. Apparently, emigration represented in the most part redundant labor and

dependents. This increased the availability of output per person remaining in the South; prompted a large yearly inflow of emigrant remittances; and increased the number of effectively employed in the labor force as a whole and within each sector of the economy. This conclusion is significant since, as seen in Chapter II, Myrdal and Hirschman viewed emigration as potentially the largest and most harmful of the Backwash Effects on a poor region.

(3) Since over the entire 1952-1967 period there was no net Backwash Effect on the South, the large government effort on behalf of the South only added to a net Spread Effect in promoting the development of this region. As seen in the previous chapter, a great deal of the government aid to the South (financed by Northern taxes) went to subsidize public consumption and to relieve poverty in the South, and only the rest was used for truly developmental purposes. However, were this aid to the South to come to a sudden halt (or be greatly reduced within a short time), even if the effect of the unhampered operation of the market mechanism is likely to continue to prove beneficial to the South, the South would certainly revert to a much lower rate of growth, thus causing the existing North-South inequality to grow much faster than in the recent past. This would probably end all hopes of closing the regional gap within the next few decades. Growth does not seem to have become self-propelled in the South--yet.

(4) On a more general level, this dissertation represents the first serious (and it is hoped, successful) challenge to Myrdal's and Hirschman's Theory of the Backwash (Polarization) and Spread (Trickling-Down) Effects. Theoretically, it was shown (in Chapter II) that there is no justification for believing that the unhampered operation of the market mechanism would function always, or even usually, in a way which is detrimental to an underdeveloped region. This is an empirical question which must be settled by a separate empirical analysis in each case. Empirically, the work of Chapters III-VI seem to indicate that in the case of Italy, the net effect of the operation of the market mechanism functioned in a way which was beneficial to the South. This is, to my knowledge, the first time that this important question has been answered by actual, detailed, and careful empirical work rather than, as in the past, by "impressionistic evidence." Not only was an answer provided in qualitative terms but a quantitative estimate was also advanced for the net effect on the South of the unhampered operation of the market mechanism as a result of its association with the North. Meaningful empirical applications of the Theory of the Backwash and Spread Effects, as this theory was left by its originators, and without the corrections, refinements, and the theoretical extension presented in Chapter II, would have been impossible.

The broad theoretical strokes painted by Myrdal and Hirschman and the almost complete qualitative nature of their theory were at once this theory's great weakness and strength. They were a weakness because a theory devoid of empirical content is a useless theory. They were its great strength because it allowed the theory to go untested (but generally accepted) for such a long time. That it was so widely accepted is entirely the fault of other economists who, persuaded by the theoretical arguments of Myrdal and Hirschman, adopted the theory without any empirical testing--indeed, without critical evaluation. The theory seemed so reasonable! The poor region shoulders the cost of raising workers who then emigrate to the developed and dynamic region thus contributing to the latter's growth; because of the widespread external economies in the dynamic, but not in the poor region, returns to capital are higher in the first than in the second area, so that if the market is allowed to operate unhampered, that little capital that is raised in the backward region is invested in the richer one; finally, the more efficient manufacturing firms in the developed area cause the failure of whatever manufacturing firms might exist in the underdeveloped region and acts as a deterrent to the expansion of existing firms and to the setting up of new ones; one of the few "benefits" that could possibly accrue to the poor region is the incentive to increase its agricultural, raw material, and mineral output caused by the fast growth of the advanced region,

but this is not an unmitigated benefit since it preserves the subordinate status of the poor region; another possible benefit is the reduction in the rate of unemployment and underemployment in the poor region, but this effect is overwhelmed by the fact that emigrants represent mostly the skilled, the intelligent, the young, and the healthy so that emigration is more likely to hurt than help the poor region. Indeed, the arguments advanced by Myrdal and Hirschman were so convincing that even after recognizing the theoretical shortcomings of their theory (but before I started the empirical analysis) I thought that the Italian case was a particular example in which the Backwash Effects exceeded the Spread Effects.

If I were to advance a tentative explanation for the widespread acceptance of Myrdal's and Hirschman's theory (in addition to the reason just presented, i.e., the common sense that it takes), I would say that it resulted from the application of (or at least from the stress placed on) absolute cost rather than opportunity cost analysis. Thus, for example, Myrdal talks of the great cost incurred by the economy of the poor region in raising workers (absolute cost) who then emigrate and benefit the advanced region. It is true that a great cost is incurred by the economy of the poor region to raise a new generation of emigrants (a rough estimate of this for the South was presented in Chapter VII), but this is completely irrelevant. What is important is whether they could be fruitfully employed within

the poor region. If they cannot, it is better for them and for the poor region if they emigrate. Hirschman is a little more careful in stating that the emigration of unskilled workers may reduce the rate of unemployment of the poor region, but he believes that emigration removes a great number of skilled workers and this is necessarily harmful to the poor region. The implicit assumption is that these emigrating skilled workers must be needed (or will soon be needed) in the poor region. But this need must be proved, not assumed. Thus the Italian South raised more lawyers, doctors, accountants, and teachers than it needed. Their emigration, though dramatically referred to by many as the "intellectual hemorrhage of the South," was seen (in Chapter III) to be beneficial, not harmful, to the south. The use of absolute cost rather than opportunity cost occurs not only in analyzing emigration but also in the case of the interregional flow of capital and goods. Inadvertently, I submit, absolute cost slipped into their analysis when opportunity cost was only admissible.¹

¹Throughout this dissertation interest was focused almost entirely on the poor region. The question of how the rate of growth of the more advanced region is likely to be affected by its association with the poor region has been treated theoretically by Professors Bernard Okun and Richard W. Richardson in their article: "Regional Income Inequality and Internal Population Migration," Economic Development and Cultural Change, 1961, pp. 128-43.

Major Policy Suggestions Advanced

The major policy suggestions ensuing from this dissertation are the following:

(1) There is at present a strong need to introduce birth control in the South, on a large scale. The acceptability of this policy on the part of the Southern population, and the political difficulty in establishing it on a regional basis, have been noted. As pointed out earlier, birth control is greatly needed in the South in order to avoid the cost of continuing to raise millions of surplus workers in the future.¹ The South could then use the foregone cost of raising surplus labor for export for directly productive investment in the South and thus speed its rate of economic development. Some indication of the savings that would accrue to the South by a policy of birth control² can be deduced by looking at the cost incurred by the South

¹As seen in Chapter III, it was estimated that the South, with 33% of the Italian labor force in 1966, will supply (in the absence of birth control) more than 75% of the increase in the Italian labor force during the next two decades. In view of the fact that the South still has a great deal of unskilled surplus labor, it would be completely unrealistic to expect that most or even a great part of the expected very large increase in its labor force will find fruitful employment within the South in the next few decades. As a result a great deal of this increase in the quantity of workers supplied by the South will probably represent surplus labor and will have to emigrate.

²If left on its own, it might take decades before the very high present birth rate of the South falls to a much lower and acceptable level (i.e., a rate that would make mass emigration unnecessary in the future). Admittedly, this policy may take 5 or more years to become fully operative; meanwhile, emigration of surplus labor from the South might have to continue.

in raising surplus workers during the past two decades. In Chapter VII, it was seen that it might have taken \$10,000 or more (and certainly more in the future) to raise a worker. From 1952 to 1968 (Chapter III, Table 11) almost 900,000 workers emigrated from the South to the North. With dependents who were just about to enter the labor force, the figure certainly exceeded one million. This makes the total cost of raising the surplus labor that emigrated to the North more than 10 billion dollars.¹ Emigrants' remittances (from Southerners who emigrated to the North) were estimated to be only 2.5 billion dollars over the same period (see column 5 of Table 22 in Chapter IV). Bygones are bygones, but the introduction of birth control methods now in the South, on a wide enough base, could prevent the repetition for the next several decades of what happened in the past twenty years. The cost of such a birth control program would be minimal² in relation to the economic returns that would be obtained from it.

(2) It is extremely important that Southern agriculture be reorganized along more rational lines (farms large enough to be economically run, introduction of products suited to the soil of the South, farm cooperatives, etc.) so as to increase farm incomes. Should this reorganization

¹As seen in the discussion related to Table 19 in Chapter III, about a third of this cost was incurred by the North.

²See the articles of Stephen Enke mentioned in Chapter VII.

not occur within the next few years, the South may witness widespread abandonment of good fertile land and will have missed an opportunity to satisfy by domestic production a greater proportion of its food and raw material needs (which recently have become a strain on its balance of trade). As pointed out earlier, the land reform accomplished almost nothing along these lines (money was spent mostly on relieving poverty).

(3) Subsidies to stimulate industrial investments in the South are much too low and complicated to have any significant effect. These subsidies must be greatly simplified, they must be increased very much (say to 20-30%),¹ it must be made clear that they will definitely be temporary in nature (say 10 years), and they must be applied across-the-board. What is needed is the political will to do it. A rough quantitative estimate of the benefits that might conceivably result in the South from this policy is indicated in Chapter VI or can be estimated following the same line of analysis.

(4) When there is a conflict between efficiency and the maximization of employment, as it usually happens in a development program, it is efficiency which must prevail.

¹From a strictly economic point of view it may make no sense to develop the South. If that were indeed the case, a policy of increasing subsidies to industrial undertakings in the South would be justified on political grounds alone (that is, given the political commitment on the part of the Central Government to industrialize the South), not on economic grounds. (See the discussion relating to regional theory in Chapter I).

In the long run, it is better to establish industries which are very efficient and competitive (on national and international markets) and which pay high salaries and let the excess labor emigrate, than to establish inefficient but L-intensive industries in an effort to maximize employment. There is no necessary inconsistency with the statement (made in point 1) that emigration is a very wasteful way of eliminating surplus labor and what has been said here. In the long run, with a much lower birth rate in the South, efficiency considerations will dominate, and the policy suggested above makes the "long run" closer to us. Were emigration impossible (color bar, etc.), this policy, of course, would probably not be justified.

(5) There is at present no need for large-scale, technical training programs in the South, since there seems to be no shortage of technical personnel. Were such large-scale training programs undertaken in the South, it would mostly be preparing workers for industrial jobs in the North and abroad. What is needed instead is a "manpower analysis"¹ which involves the coordination between the new industrial jobs expected to open up in the South and the training of technical personnel, so that they would complete their training when the new industrial jobs become available. This is best done within the framework of a comprehensive,

¹Frederick Harbison, "Human Resources Development Planning in Modernizing Economies," International Labor Review, May 1962, pp. 1-25.

detailed, development plan. The apathy of Italians to planning has, however, been noted.¹ But much can be done to make the needs for, and availabilities of, technicians match, even in the absence of an overall, detailed, development plan, by the use of the manpower analysis technique mentioned earlier. This would greatly reduce training costs in the South while ensuring sufficient availability of technical personnel.

(6) A major, widespread, and sustained effort must be made in the schools, through the mass media, by subsidized travel between the North and the South of Italy, by having Southern children live with Northern families and Northern children live with Southern families for a summer or for a year, etc.--to help to correct the distorted images which Southerners and Northerners have of each other. Northerners must learn not to "preach" to Southerners, otherwise Englishmen and Americans could do the same to them. Southerners must open their ears, their eyes, but mostly their minds to the twentieth century. Only by doing this will Italy be unified not only politically but also economically and morally. The challenges are very great but the rewards of success would be even greater.

¹SVIMEZ does not do any planning.

BIBLIOGRAPHY

Books

- Bacci, Livi, and Pilloton, Franco. Popolazione e Forze di Lavoro delle Regioni Italiane al 1981. Roma: SVIMEZ, 1968.
- Banca D'Italia. Bollettino N. 2, 1951-1969. Roma: Banca D'Italia, 1951-1969.
- _____. Relazione, 1951-1969. Roma: Banca D'Italia, 1952-1970.
- Becker, Garry. Human Capital. New York: National Bureau of Economic Research, 1964.
- Benoit, Emile. Europe at Sixes and Sevens: The Common Market, the Free Trade Association, and the United States. New York: Columbia University Press, 1961.
- Cafiero, Salvatore. Le Migrazioni Meridionali. Roma: Giuffre', 1964.
- Capperdoni, Enrico. Lo Sviluppo Italiano del Dopo-Guerra. Padova: Marsilio, 1968.
- CENSIS. Costi e Ricavi dell'Istruzione. Roma: CENSIS, 19661
- _____. Indagine Sui Laureati dalle Universita' Meridionali nel 1966.
- _____. Problemi di Formazione Professionale. Roma: CENSIS, 1969.
- _____. Rapporto sugli Aspetti Finanziari del Sistema Scolastico. Roma: CENSIS, 1969.
- _____. Rapporto Sulla Situazione Sociale del Paese. Roma: CENSIS, 1969.
- Chenery, Hollis B., and Clark, Paul G. Interindustry Economics. New York: John Wiley and Sons, Inc., 1959.
- Conrad, Alfred, and Meyers, John. The Economics of Slavery. Chicago: Aldine Publishing Co., 1964.

- D'Antonio, Mariano. Lo Sviluppo delle Regioni Italiane. Napoli: Giannini, 1969.
- Della Porta, Glauco. Sviluppo Economico Regionale - Teoria e Politica. Rocca San Casciano: Cappelli, 1963.
- Di Rienzo, Pilade. Movimento Migratorio Interno in Base alle Iscrizioni e Cancellazioni Anagrafiche per Trasferimento di Residenza. Roma: ISTAT, 1965.
- Giannone, Antonio. Spese di Produzione e Reddito Nazionale. Roma: Societa' Italiana di Statistica, 1957.
- _____. Ulteriori Considerazioni a Proposito di Spese di Produzione e Reddito Nazionale. Roma: Societa' di Statistica Italiana, 1958.
- Higgins, B. Economic Development. New York: Norton, 1959.
- Hildebrand, G. Growth and Structure in the Economy of Modern Italy. Cambridge: Harvard University Press, 1965.
- Hirschman, Albert O. The Strategy of Economic Development. New Haven: Yale University Press, 1958.
- La Cassa per il Mezzogiorno. La Cassa per il Mezzogiorno. Roma: Ufficio Stampa, 1969.
- _____. Bilancio 1951-1968. Roma: Ufficio Stampa, 1951-1969.
- La Palombara, J. Italy: The Politics of Planning. Syracuse: Syracuse University Press, 1966.
- Lewis, John P. Quiet Crisis in India. New York: Doubleday, 1964.
- Lewis, W. A. Development Planning. New York: Harper and Row, Co., 1966.
- Lutz, Vera. Italy - A Study in Economic Development. New York: Oxford University Press, 1962.
- Meier, G. ed. Leading Issues in Development Economics. New York: Oxford University Press, 1964.
- Mortara, Giorgio. Economia della Popolazione. Torino: Unione Tipografica Editrice Torinese, 1960.
- Myrdal, Gunnar. An International Economy. New York: Harper and Row Co., 1956.

- _____. Rich Lands and Poor. New York: Harper and Row Co., 1957.
- Nourse, Hugh O. Regional Economics. New York: McGraw-Hill, 1968.
- Pilloton, Franco. Effetti Moltiplicativi degli Investimenti della Cassa per il Mezzogiorno. Roma: SVIMEZ, 1960.
- Predetti Aldo. Le Componenti Economiche Sociali e Demografiche della Mobilita' Interna della Popolazione Italiana. Milano: Societa' Editrice Vita e Pensiero, 1965.
- Reubens, Edwin P. Migration and Development in the West Indies. Jamaica: Institute of Social and Economic Research, 1961.
- Saraceno, Pasquale. Ricostruzione e Pianificazione 1943-1948. Bari: Laterza, 1969.
- SVIMEZ. Fenomeni Economici Caratteristici al Nord e Sud D'Italia, 1950-1960. Roma: SVIMEZ, 1962.
- _____. I Quattro Mezzogiorno. Roma: SVIMEZ, 1961
- _____. Le Forze del Lavoro del Mezzogiorno dal 1954 al 1958. Roma: SVIMEZ, 1959.
- _____. Le Migrazioni Interne nel Periodo 1952-1966. Roma: SVIMEZ, 1968.
- _____. Mutamenti della Struttura Professionale e Ruolo della Scuola. Roma: Giuffre', 1961.
- _____. Mutamenti della Struttura Professionale e Ruolo della Scuola - Previsioni al 1975. Roma: SVIMEZ, 1961.
- _____. Sintesi delle Agevolazioni per lo Sviluppo Economico del Mezzogiorno. Roma: SVIMEZ, 1969.
- _____. Trasformazioni Sociali e Culturali in Italia e Loro Riflessi Sulla Scuola. Roma: Giuffre', 1962.
- _____. Un Secolo di Statistiche Italiane: Nord e Sud 1861-1961. Roma: SVIMEZ, 1961.
- Tagliacarne, G. I Conti Provinciali, 1961-1968. Roma: Banca Nazionale del Lavoro, 1969.

United Nations, Commission for Europe. Economic Survey of Europe. Geneva: U.N., 1953.

_____. Economic Survey of Europe. Geneva: U.N. 1954.

Articles

Ackley, Gardner, and Dini, Lamberto. "Tax and Credit Aids to Industrial Development in Southern Italy," Banca Nazionale del Lavoro, Quarterly Review (December, 1959), 339-368.

Baer, Werner, "Regional Inequality and Economic Growth in Brazil," Economic Development and Cultural Change, XII, 1964, 268-285.

Cafiero, Salvatore, e Pizzorno, Alessandro. "Sviluppo Industriale e Imprenditori Locali," in Il Mezzogiorno nelle Ricerche della SVIMEZ, 1947-1965. Roma: Giuffrè, 1968, 523-552.

Caizzi, B. "The Main Themes of the History of the Southern Question," Banca Nazionale del Lavoro, Quarterly Review (December, 1962), 3-31.

Chenery, Hollis B. "Development Policies for Southern Italy," The Quarterly Journal of Economics, LXXVI (November, 1962), 515-547.

Clough, S. B., and Levi C. "Economic Growth in Italy: An Analysis of the Uneven Development of North and South," Journal of Economic History, 1965-1966, 343-48.

Dell'Amore, Giordano. "Gli Agilibri Territoriali fra Investimenti e Risparmi," Rivista Internazionale di Scienze Economiche e Commerciali, 1956, 931-936.

De Meo, Giuseppe. "Evoluzione Storica delle Forze di Lavoro in Italia," Giornale degli Economisti (Luglio-Agosto, 1969), 409-428.

Duseberry, James. "Some Aspects of the Theory of Economic Development," Explorations in Entrepreneurial History, III (December, 1950), 63-102.

Eckaus, Richard S. "Factor Proportions in Underdeveloped Areas," The American Economic Review, XLV (September, 1955), 539-565.

_____. "The North-South Differential in Italian Economic Development," Journal of Economic History, XX (September 1961), 285-317.

- "Emigrating State: Reform and Red Tape," The Economist (March 18, 1967), 39-42.
- Enke, Stephen. "The Gains to India from Population Control," Review of Economics and Statistics (May, 1960), 175-181.
- _____. "The Economics of Government Payments to Limit Population," Economic Development and Cultural Change (July, 1960), 339-348.
- _____. "The Economic Aspects of Slowing Down Population Growth," The Economic Journal (March, 1966), 44-56.
- Galasso Giuseppe. "Il Mezzogiorno nel Quadro Demografico dell'Evolutione Italiana," in Nord e Sud. Torino: Fondazione Einaudi, 1968. 121-147.
- Gambino, Amedeo. "The Ascertainment of Savings Flow," Banca Nazionale del Lavoro, Quarterly Review (June, 1963), 174-191.
- Gini, Corrado. "Apparent and Real Causes of American Prosperity," Banca Nazionale del Lavoro, Quarterly Review (July, 1948), 351-364.
- "Gli Squilibri Territoriali fra Investimenti e Risparmi," Rivista Internazionale de Scienze Economiche e Commerciali (Ottobre, 1956), 931-936.
- Harbison, Frederick. "Human Resource Development Planning in Modernizing Economies," International Labor Review (May, 1962), 1-25.
- Hirschman, Albert O. "Investment Policies and 'Dualism' in Underdeveloped Countries," The American Economic Review, XLVII (September, 1957), 550-570.
- "I.R.I. Bashes On," The Economist (September 9, 1967, 917.
- "I.R.I.: Rag-Bag or Show-Case?" The Economist (February 15, 1964), 641.
- "Italy's Green Revolution," The Economist (July 16, 1966), 278-279.
- "Italy: Plan without Muscle," The Economist (February 6, 1968), 278-279.
- "Italy's I.R.I.: How Good a Formula," The Economist (October 7, 1967), 60-61.

- Lutz, Vera. "Some Structural Aspects of the Southern Problem: The Complementarity of 'Emigration' and Industrialization," Banca Nazionale del Lavoro, Quarterly Review (December, 1961), 367-402.
- Mass, A. "Benefit-Cost Analysis: Its Relevance to Public Investment Decisions," Quarterly Journal of Economics (May, 1966), 208-225.
- Michalopoulos, C. "Labor Migration and Optimum Population," Kyklos, 1968, 130-145.
- Molinari, Alessandro. "Localizzazione Industriale e Costi Sociali dell'Insediamento di Nuove Unità Lavorative," in Mezzogiorno nelle Ricerche della SVIMEZ, 1947-1967. Roma: SVIMEZ, 1967. 273-278.
- _____. "Unemployment Statistics in Italy," Banca Nazionale del Lavoro, Quarterly Review (April, 1952), 76-88.
- "Movimento Economico Interno e Interscambio," Scienze Economiche e Commerciali (July, 1963), 605-621.
- Occhiuto, A., and Sarcinelli, M. "Flussi Monetari tra Nord e Sud," Bollettino N. 2. Roma: Banca D'Italia, 1962.
- Okun, Bernard, and Richardson, Richard W. "Regional Income Inequality and Internal Population Migration," Economic Development and Cultural Change, IX, 1961, 128-143.
- "Planning to Plan," The Economist (March 18, 1967), 5-6.
- Ranis, Gustav, and Fei, John C. H. "A Theory of Economic Development," The American Economic Review, LI (September, 1961), 533-559.
- Reubens, Edwin P. "Capita-Labor Ratios in Theory and in History: Comment," The American Economic Review, LIV (December, 1964), 1052-1069.
- Rossi-Doria, Manlio. "Il Mezzogiorno Agricolo e il Suo Avvenire," in Nord e Sud. Torino: Fondazione Einaudi, 1968, 285-352.
- Saraceno, Pasquale. "La Politica di Sviluppo di un'Area Sottosviluppata nell'Esperienza Italiana," in Il Mezzogiorno nelle Ricerche della SVIMEZ, 1947-1967. Roma: Giuffrè, 1968.

- Singer, Hans W. "Social Development: Key Growth Sector," International Development Review, VII (March, 1965) 3-8.
- Sjaastad, Larry A. "The Costs and Returns of Human Migration," Journal of Political Economy, LXX (October, 1962), 80-93.
- The New York Times, January 13, 1969. 38, 41.
- _____. January 22m 1969. 11
- _____. January 25, 1969. 15
- _____. March 4, 1969. 60
- _____. May 13, 1969. 9
- _____. October 29, 1969. 25.
- _____. December 7, 1969, Sect. II. 2.
- _____. June 5, 1970. 8
- Tremelloni, Roberto. "Cent'Anni dell'Industria Italiana, 1861-1961," in L'Economia Italiana dal 1861 al 1961. Milano: Giuffre', 1961, 187-230.
- Vannutelli, C. "Labor Costs in Italy and the E.E.C. Countries," Banca Nazionale del Lavoro, Quarterly Review (December, 1964), 3-30.
- Vochting, Friedrich. "Considerations on the Industrialization of the Mezzogiorno," Banca Nazionale del Lavoro, Quarterly Review (September, 1958), 325-376.
- _____. "Industrialization or 'Pre-Industrialization' of Southern Italy," Banca Nazionale del Lavoro, Quarterly Review (April-June, 1952), 67-75.
- Weisbrod, Burton. "The Valuation of Human Capital," The Journal of Political Economy (October, 1961), 425-436.
- Williamson, Jeffrey. "Regional Inequality and the Process of National Development," Economic Development and Cultural Change, XIII (July, 1965), 1-84.

Government Publications

- Comitato dei Ministri per il Mezzogiorno. Relazione Sull'Attuazione del Piano di Coordinamento degli Interventi nel Mezzogiorno. Roma, 1969.
- _____. Studi Monografici sul Mezzogiorno. Roma, 1969.
- Commissione Parlamentare Sulla Disoccupazione. Inchiesta Speciale sulla Disoccupazione. Roma, 1953.
- ISTAT. Annali di Statistica, Serie VIII, Vol. XV, Roma, 1965.
- _____. Annuario di Statistica Agraria, 1951-1966. Roma, 1953-1969.
- _____. Annuario di Statistiche Demografiche, 1956-1966. Roma, 1958-1969.
- _____. Annuario di Statistiche Giudiziarie, 1951-1968. Roma, 1952-1969.
- _____. Annuario Statistico dell'Istruzione Italiana, 1951-1966. Roma, 1953-1969.
- _____. Annuario Statistico Italiano, 1950-1969. Roma, 1951-1970.
- _____. IX^o Censimento Generale della Popolazione, 4 Novembre, 1951, Dati Generali Riassuntivi. Roma, 1958.
- _____. IX^o Censimento Generale della Popolazione, 4 Novembre, 1951, Vol. I, Dati Sommari per Comune, Appendice A. Roma, 1966.
- _____. X^o Censimento Generale della Popolazione, 15 Ottobre, 1961, Vol. III, Dati Sommari per Comune, Appendice. Roma, 1966.
- _____. III^o Censimento Generale dell'Industria e del Commercio, 5 Novembre, 1951, Dati Generali Riassuntivi, Vol. XVII. Roma, 1957.
- _____. IV^o Censimento Generale dell'Industria e del Commercio, 16 Ottobre, 1961, Dati Generali Riassuntivi, Vol. VII. Roma, 1968.
- _____. I Conti Economici Nazionali e Territoriali dell'Italia, Anni 1951-1965. Supplemento Straordinario al Bollettino Mensile di Statistica N. 12, Dicembre, 1967.

. I Conti Economici Nazionali dell'Italia, 1965-1967. Roma, 1968.

. Indagine Speciale su Alcuni Aspetti della Vita Scolastica Italiana. Roma, 1967.

. Occupazione in Italia negli Anni 1951-1965, Supplemento Straordinario al Bollettino Mensile di Statistica N. 8, Agosto, 1966.

. Occupazione in Italia negli Anni 1951-1965, Agricoltura, Attivita' Terziarie e Publica Amministrazione. Supplemento Straordinario al Bollettino Mensile di Statistica N. 12, Dicembre, 1966.

. Popolazione e. Movimento Anagrafico dei Comuni, 1967-1968. Roma, 1968-1969.

. Primi Studi sui Conti Economici Territoriali. Roma, 1960.

. Rilevazione Nazionale delle Forze di Lavoro, 11 Ottobre, 1968. Roma, 1968.

Italian Affairs, 1950-1969.

Ministero degli Affari Esteri. Problemi del Lavoro Italiano all'Estero, Relazione Annuale 1965-1968. Roma, 1966-1969.

Ministero del Tesoro. Gazzetta Ufficiale 1950-1969. Roma, 1951-1970.

Unpublished Material

Bignami, G. Receipts of International Checks by Region, 1963-1968. Roma: Ministero delle Poste e Telegrafi, 1969.

Ministero del Lavoro e. delle Previdenze Sociali. Statistiche del Lavoro 1960-1968. Roma, 1969.

Stern, Joseph J. Growth and Regional Equity in Pakistan. Cambridge, Massachusetts: Center for International Affairs, Harvard University, 1968.