

# Trends In The Rentier Income Share In OECD Countries, 1960-2000

Dorothy Power Gerald Epstein Matthew Abrena

2003

# RESEARCH INSTITUTE

10th floor Thompson Hall University of Massachusetts Amherst, MA, 01003-7510 Telephone: (413) 545-6355 Facsimile: (413) 545-2921 Email:peri@econs.umass.edu Website:

http://www.umass.edu/peri/



## **WORKING**PAPER SERIES

Number 58a

### TRENDS IN THE RENTIER INCOME SHARE IN OECD COUNTRIES, 1960-2000

Dorothy Power, Gerald Epstein, and Matthew Abrena\*

This Draft: April, 11, 2003

Dorothy Power is in the economics graduate program at the University of Massachusetts at Amherst. Gerald Epstein is Professor of Economics and co-director of the Political Economy Research Institute (PERI) at the University of Massachusetts at Amherst. Matthew Abrena is a student at the University of Massachusetts at Amherst. The authors thank James Crotty for very helpful discussions. The authors also thank the Ford and Rockefeller Foundations for financial support and the OECD for access to many of the statistics used in this paper.

### **ABSTRACT**

This paper presents the first set of estimates of the *rentier* share of income for twenty-nine OECD countries. We define rentier share to mean the income accruing to financial institutions and the holders of financial assets. The years of coverage vary by country, but span the period 1960-2000. The paper presents the estimates, describes in detail the methods used to construct the series, and presents comprehensive information on our data sources. In addition, we compare the trends in rentier shares with the share of income going to non-financial corporations. Overall we find that the rentier share of income rose in most countries between the 1960's and 1970's on the one hand, and the 1980's and 1990's, on the other. At the same time, movements in rentier income over this period vary from country to country, and are quite variable over time. We also present estimates for rentier shares including capital gains for a subset of countries in the 1980's and 1990's. Including capital gains substantially alters the trend of rentier shares in the 1990's, in most cases, causing them to increase.

### **Table of Contents**

I.	Introduction
II.	Rentier Income Defined
III.	Data: Rentier Income Share Not Including Capital Gains 5
IV.	Data: Rentier Income Share Including Capital Gains on Financial Assets
V.	Summary and Conclusions
	Appendix71

### I. Introduction

The modern financial sector has increased in size in many countries in recent decades. Indeed, many studies have documented aspects of the increased importance of financial institutions and markets in economies in many parts of the world. Some of these claim to show that more financial development leads to more efficient allocation of investment.(e.g. Levine and Zervos, 1998) Others dispute these claims. (Zhu, Ash and Pollin, 2002). But while there is a great deal of work on the relationship between financial development and economic growth, very few studies have investigated empirically the relationship between financial development and income distribution.<sup>1</sup>

Of course, there has been a great deal of *theoretical* discussion over the decades about the relationship between financial market developments, income distribution and economic growth. Keynes' phrase "the euthanasia of the rentier" is perhaps the most famous recent statement along these lines (Keynes, 1964; Pollin, 1997). Of course, if one goes back further, the very rich Marxist tradition has many such discussions. (e.g. Crotty, 1984) Most recently, economists, sociologists and other have investigated the role of "financialization" in the world economy. (Krippner, 2002; Science & Society, 2001) Here, some have pointed to the increasing power of a global "rentier class" of financiers who increasingly dominate policy processes, pushing for financial liberalization, inflation fighting central bank policy, and austerity oriented fiscal policy (eg. Crotty, 2002). Still, despite the great deal of excellent research on many aspects of these issues, there is relatively little work empirically documenting the trends in income accruing to those operating in the financial markets, or owning financial assets (but see Dumenil and Levey, 2001; Yeldan, 2000).

This paper presents the first comprehensive estimates of the rentier share of income for a large set of countries over a long period of time. More specifically, we present estimates for 29 OECD countries during various parts of the period covering 1960 - 2000. For comparison, we also present data on the share of income accruing as profits to non-financial corporations for these same countries over this time.

<sup>&</sup>lt;sup>1</sup> Important exceptions include Dumenil and Levy (2001), some of the articles in *Science and Society*, 2001, Stockhammer, 2000, Diwan, 2001 and Harrison, 2002.

<sup>&</sup>lt;sup>2</sup> Dumenil and Levy (2001) present estimates of the returns to finance, but only for the United States and France. Their measures, while instructive, include only financial institutions. They also present some estimates of capital gains on financial assets, but only for the U.S. and France.

This paper is intended as a comprehensive presentation of data and methods to serve as background for other, more analytical research. It is NOT intended as an analysis of the trends or discussion of their determinants. We leave that to other papers by ourselves (e.g. Epstein and Power, 2003), and, we hope, others.

The paper is organized as follows: Section I gives some historical background on the concept of rentier income and puts forth a definition of rentier income applied in this paper. Section III discusses briefly the overall trends in rentier income share not including capital gains on financial assets, presents the individual component series, and presents the data relating to the corporate non-financial sector. Section IV discusses briefly the overall trends in rentier income share including capital gains on financial assets and presents the individual component series. Section V describes in detail the trends of rentier income share as well as some hypotheses to explain these trends and their implications. A general appendix describes the methods used to calculate rentier income share and sources of the data for both rentier income share and its non-financial sector analogue, corporate non-financial sector profit as a share of GDP. For reasons of length, a separate paper presents detailed technical information and detailed individual country notes (See Power, Epstein and Abrena, "Technical Appendix and Country Notes To: Trends in the Rentier Income Share in OECD Countries, 1960-2000." on www.umass.edu/peri). In time, we will post the underlying series on the Political Economy Research Institute web site (www.umass.edu/peri) so that other researchers can use them.

### II. RENTIER INCOME DEFINED

There is no commonly accepted definition of rentier income. Most authors use a definition to capture income that accrues from financial market activity and the ownership of financial assets rather than activity in the "real" sector or the holding of "real" assets such as real estate or capital equipment. Lenin, for example, defines a rentier as "a person who lives by 'clipping coupons', who take no part in any enterprise whatever, whose profession is idleness". According to *The Penguin Dictionary of Economics*, a rentier is "someone who receives his income in the form of interest and dividends rather than in wages or salary and who does not otherwise participate in the process of production. A provider of capital and person of independent means." The *Dictionary of Business: Oxford University Press* defines a rentier as "a person who lives on income from rents or on receiving rent from land. The meaning is sometimes extended to include anyone who lives on the income derived from his assets rather than a wage or salary." Keynes, in his *General Theory*, refers to the rentier as "the functionless investor," who generates income via his ownership of capital, thus exploiting its "scarcity-value". For this paper, we define rentier income similar to way the Michel Kalecki defined it in his famous article, the "Political Aspects of Full Employment" (Kalecki, 1972). For Kalecki, rentier income referred to incomes accruing to those owning financial institutions and financial assets more generally.

Thus, we define rentier income to be he profits realized by firms engaged primarily in financial intermediation plus interest income realized by all non-financial non-government resident institutional units, i.e. the rest of the private economy, plus capital gains on financial assets realized by all non-

\_

<sup>&</sup>lt;sup>3</sup> Lenin quoted in Geoffrey Pilling, "Keynesianism, State Spending, and the "Arms Economy," http://www.marxists.org/archive/pilling/works/keynes/ch04.htm

<sup>&</sup>lt;sup>4</sup> The Penguin Dictionary of Economics and Dictionary of Business: Oxford University Press, <a href="www.xrefer.com">www.xrefer.com</a>, s.v. "rentier". In addition, there is a sizeable literature on rentier states or rentier economies, in which an economy is sustained by selling a natural resource internationally. This theory was originally used to describe the governing systems and political economy of the Middle Eastern oil economies. In this sense, rentier income is the income paid by the international buyers to the seller (country) of the resource. This is an example of the term rentier being used to describe a real sector activity.

<sup>&</sup>lt;sup>5</sup> John Maynard Keynes, General Theory of Employment, Interest, and Money, Chapter 24.

financial non-government resident institutional units. All rentier income data are presented as shares of GDP.

Our estimates were constructed from the OECD *National Accounts Vol. II* 2001 and 1997 eds., OECD *Bank Profitability: Financial Statements of Banks* 2001 ed., and OECD *Institutional Investors Yearbook* 2001 ed.<sup>6</sup> Financial sector profit data were taken from the National Accounts and from the Bank Profitability data. Interest receivable and GDP data were taken from the National Accounts. Data on capital gains data were mostly taken from the Institutional Investors Yearbook. Data on non-financial sector profit share were taken from the National Accounts. These data have been included for comparison with the financial sector profit data. Appendix I gives detailed information on the sources of all data and on the methods of construction.

Two separate sections reporting the data have been included in this paper – Section III reports rentier income share NOT including capital gains on financial assets; and Section IV reports rentier income share including capital gains on financial assets. The main reason for this separation is that we believe that the quality of the capital gains data are not as high as the quality of the other data used in this study. In general, it is very difficult to find data on capital gains on financial assets. As a result, we had to estimate these data, in some cases using rather indirect methods. As a result, we have much more confidence in our estimates of rentier shares without capital gains. Moreover, even allowing for the poorer quality of data, we were only able to make estimates of capital gains for a small share of our sample, both in terms of countries and in terms of time periods.

### III. DATA: RENTIER INCOME SHARE NOT INCLUDING CAPITAL GAINS

The rentier income share data presented in this section does not include capital gains. Data presented here thus include entrepreneurial income of financial institutions plus interest income.

### III.1 Overall Trends of Rentier Income Share

While there is no single trend of rentier income share among all of the countries, patterns of rentier income share do emerge. Table III.1 summarizes for each country the trend of rentier income share compared to profits in the corporate non-financial sector.

<sup>&</sup>lt;sup>6</sup> Organization for Economic Co-operation and Development (OECD), *National Accounts Volume II: Detailed Tables*, (Paris: OECD, 2001); OECD, *National Accounts Volume II: Detailed Tables*, (Paris: OECD, 1997); OECD, *Bank Profitability: Financial Statements of Banks*, (Paris: OECD, 2001); OECD, *Institutional Investors Yearbook*, (Paris: OECD, 2001).

Table III.1.1: Rentier Income Share Not Including Capital Gains on Financial Assets in Some OECD Countries, 1960-2000

Country	Years R	eported	Shar	ge Decade e 1960s t of GDP)	Shar	ge Decade re 1970s at of GDP)	Shar	ge Decade e 1980s t of GDP)	Share 19	ge Decade 90s (Percent GDP)	over th 1960s/1	ge Change te Period 970s and s/1990s
		Non-		Non-		Non-		Non-		Non-		Non-
		Financial		Financial		Financial		Financial		Financial		Financial
	Rentier	Sector	Rentier	Sector	Rentier	Sector	Rentier	Sector	Rentier	Sector	Rentier	Sector
	income	Profit	income	Profit	income	Profit	income	Profit	income	Profit	income	Profit
	share	Share	share	Share	share	Share	share	Share	share	Share	share	Share
AUSTRALIA	1969-1998	1969-1995	6.67	12.66	7.92	8.10	14.50	5.24	12.97	7.91	88.4%	-26.76
AUSTRIA	1987-1999	1995-1999					8.53		6.34	13.49		
BELGIUM	1970-1999	1970-1999			11.69	11.66	21.81	12.92	21.28	14.66	84.4%	18.30
CANADA	1982-1999						12.22		13.15			
CZECH REPUBLIC	1993-1999								-0.64			
DENMARK	1970-1999	1981-1999			11.44		12.28	6.45	11.75	16.05	5.0%	
FINLAND	1960-2000	1960-2000	5.61	14.28	6.04	7.37	6.58	6.72	8.75	10.56	31.5%	-19.33
FRANCE	1970-1999	1970-1995			6.24	6.39	10.62	5.97	21.19	11.07	155.0%	23.25
GERMANY	1960-1999	1960-1999	2.98	16.23	5.02	12.09	7.83	9.80	7.43	11.16	90.9%	-26.02
GREECE	1989-1998						0.29		0.59			
HUNGARY	1994-1999								0.24			
ICELAND	1979-1999				0.65		0.34		0.34		-47.1%	
IRELAND	1995-1998								2.72			
ITALY	1980-1999	1980-1999					18.77	11.68	18.08	16.12		
JAPAN	1960-1999	1960-1998	9.00	11.96	12.30	9.02	14.27	9.91	11.22	8.25	19.7%	-12.54
KOREA	1975-1999	1975-1995			4.69	7.32	8.64	7.93	11.28	8.23	112.1%	9.90
LUXEMBOURG	1979-1999	1979-1999			6.14	6.14	6.43	6.43	12.41	12.41	53.3%	53.31
MEXICO	1989-1999	1993-1999					1.52		6.74	23.92		
NETHERLANDS	1977-1999	1977-1999			13.47	9.86	18.69	13.06	20.97	15.33	47.2%	43.90
NEW ZEALAND	1990-1999								7.71			
NORWAY	1978-2000	1978-1999			6.03	10.74	10.45	12.44	9.56	15.20	65.9%	29.31
POLAND	1993-1999								0.63			
PORTUGAL	1986-1998	1986-1998					15.92	14.90	16.90	11.87		
SPAIN	1979-1999	1985-1999			14.47		12.53	8.70	13.21	9.22	-11.0%	
SWEDEN	1979-1998	1980-1999			13.61		12.34	2.95	12.30	5.51	-9.5%	
SWITZERLAND	1979-1999	1990-1995			5.61		7.34		9.14	7.34	46.8%	
TURKEY	1983-1999						0.70		1.19			
UK	1968-2000	1968-2000	3.97	14.82	6.33	13.45	10.85	15.83	14.16	15.95	143.0%	16.19
US	1960-1999	1960-1999	14.81	11.31	22.47	10.65	38.26	12.18	33.49	9.97	92.4%	0.89

The overall trend in rentier income share, especially in industrialized countries is a rise in rentier income share during the period prior to 1990, a peak around 1990, and a decline thereafter. In several countries, rentier income share increased slightly in the late 1990's, but hardly to the level of the early 1990's. While the data presented here are less reliable with respect the actual levels, it is clear that rentier income share in the United States and in the United Kingdom is a large fraction of private sector GDP.

The countries are grouped in this section according to general trend and according to level. The trends are not identical for any group of countries, but they are roughly similar over these groups. The semi-industrialized countries are grouped separately because these countries have fewer data points than their industrialized counterparts, and the levels of rentier income share are generally much lower.

The United States displays a dramatic increase in the years prior to 1989, a peak in 1989, and an equally dramatic decline after the peak year. By the late 1990's, rentier income share in the United States had declined to the level it had been in the mid-1970's. Other countries that display this trend are Australia (peak = 1989), Norway (1990), Finland (1992), Canada (1990), Portugal (1991), Spain (1993), and Greece (1991). The increases and declines of rentier income share in these countries are dramatic. Rentier income share in Australia, Finland, and Norway approximately double during the reported years prior to 1990, and after 1990 decline again just as dramatically. Rentier income share in Greece approximately tripled between 1989 and 1991, going from 0.3% of GDP to 0.9% of GDP. It declined again after 1991 and remained around 0.7% of GDP during the rest of the 1990's. See Figures III.1.1, III.1.2, and III.1.9 (Greece).



Figure III.1.1: Rentier Income Share in the United States 1960-1999

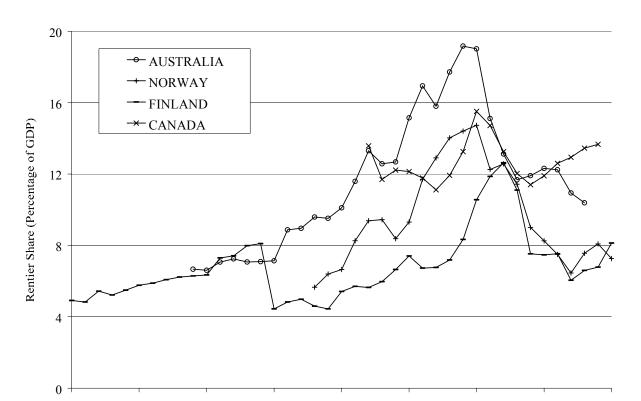


Figure III.1.2: Rentier Income Share in Australia, Norway, Finland, and Canada 1960-2000

Rentier income share in several major industrialized countries displays a similar trend. In these countries, rentier income share peaks in the late 1980's or early 1990's, but the peak is much less pronounced. These countries are Japan, Germany, Denmark, Belgium, Portugal, and Spain. Rentier income share in Japan and Germany increases during the 1960s, 1970s, and early 1980s to reach a peak in 1993 for both Japan and Germany. After 1983, rentier income share in both countries during the rest of the 1980s. Rentier income share in Japan rebounded slightly during the early 1990s before declining again to its 1962 level of about 8% of GDP in 1997. After 1997, rentier income increased dramatically, but it is not clear if this has continued because it occurs at the end of the data series. Rentier income share in Germany increased fairly steadily until 1981, when it increased faster to peak in 1983, and then fell again. By 1987, rentier income share in Germany had resumed its upward trend. See Figure III.1.3.

1975 Year 1980

→ JAPAN <del>×</del> GERMANY Rentier Share (Percentage of GDP) 

Figure III.1.3: Rentier Income Share in Japan and Germany 1960-1999

Rentier income share in Belgium increases dramatically during the 1970s and 1980s, reaching a peak in 1986 of about 24% of GDP, respectively. After 1986, rentier income share in Belgium declines, but steadily and only slightly. At the end of the reporting period, rentier income share had declined only to the early 1980s level. Rentier income share in Denmark was much more stable. For the most part, it remained between 10% and 15% of GDP during the entire reporting period. See Figure III.1.4.

Year

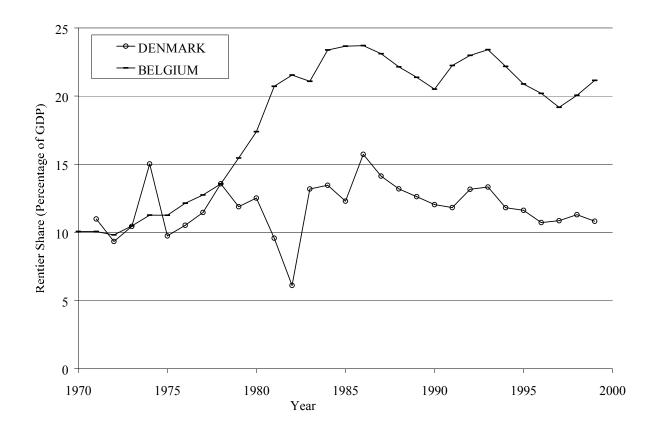


Figure III.1.4: Rentier Income Share in Denmark and Belgium 1970-2000

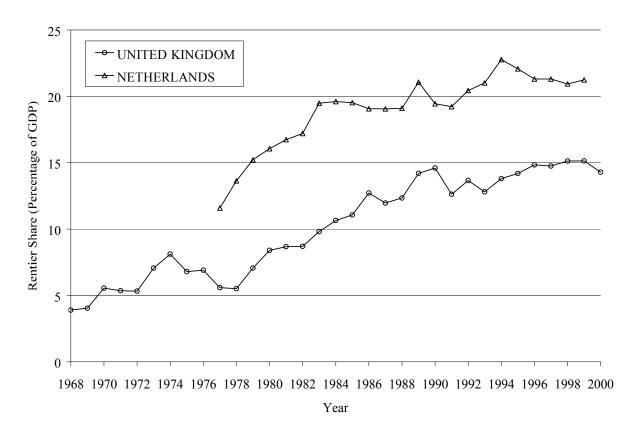
Rentier income share in Portugal and Spain declines during the early- and mid- 1980s, increases during the late 1980s to reach a peak in the early 1990s (1991 and 1993 for Portugal and Spain, respectively), and then declines again during the 1990s. In the late 1990s, rentier income share was lower than it had been in 1979 or the beginning of the reporting period, at about 8% of GDP. Rentier income share in Spain also reached a record low at the end of the reporting period, at about 13% of GDP. See Figure III.1.5.



Figure III.1.5: Rentier Income Share in Portugal and Spain 1979-1999

Rentier income share in the previous countries displayed a clear peak at some point during the period. In the following countries, rentier income share shows steady upward growth. These countries are the United Kingdom, the Netherlands, Luxembourg, Switzerland, and France. Rentier income share in these countries grew with very few exceptions during the entire reporting period. Rentier income share in the United Kingdom in 1960 was less than 5% of GDP. It dipped slightly in the late 1970s, but by 2000, it had reached about 15% of GDP, approximately doubling over the period. Rentier income in the Netherlands began around 12% of GDP. In 1999, it had reached over 20% of GDP. See Figure III.1.6.

Figure III.1.6: Rentier Income Share in the United Kingdom and the Netherlands 1968-2000



Rentier income share in Luxembourg and Switzerland grew during the 1980s and 1990s. During the 1980s, this growth was comparatively steady and modest remaining between about 5% and 10% of GDP for both countries. In the 1990s, however, rentier income in both countries experienced extremely fast growth to end the reporting period at about 14% of GDP and about 22% of GDP for Luxembourg and Switzerland, respectively. See Figure III.1.7.

\*- LUXEMBOURG - SWITZERLAND Rentier Share (Percentage of GDP) Year

Figure III.1.7: Rentier Income Share in Luxembourg and Switzerland 1979-1999

Rentier income share in France also experience steady growth during the entire reporting period. Until 1995, this growth was steady and modest, but after 1995, rentier income share grew to almost 50% of GDP from less than 15% of GDP in 1995. Rentier income share approximately quadrupled over the reporting period. See Figure III.1.8.

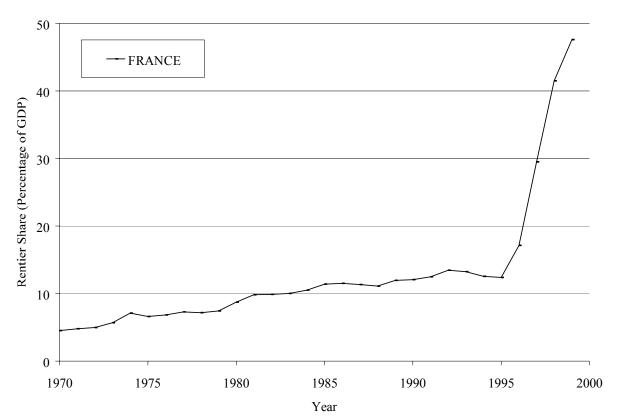


Figure III.1.8: Rentier Income Share in France 1970-2000

Rentier income share in Austria and New Zealand displays a decline in the late 1980's and early 1990s. This is curious because the early 1990's were the years in which the rentier income share of most countries was increasing or at a peak. In the mid- to late 1990's, rentier income share in both countries began to rise again. See Figure III.1.10.



Figure III.1.9: Rentier Income Share in Austria and New Zealand 1987-1999

In some semi-industrialized and emerging market countries, rentier income share displays trends of both increases and declines over the reporting period. Countries with increasing rentier income share are Korea, Ireland, and Turkey. Countries with decreasing rentier income share are Mexico, Czech Republic, Hungary, Poland, Iceland, and Greece. Although Korea and Mexico are semi-industrialized, the financial sectors in these countries are unusually sophisticated for a semi-industrialized country, and its rentier income share is much larger than that of the other semi-industrialized countries. See Figure III.1.10.

Rentier income share in Korea grew in the mid- to late- 1970s, peaked for the first time in 1980, fell during the early 1980s and then resumed an upward trend after 1983. This upward trend continued until 1996, when it fell precipitously from over 15% of GDP to about -4% of GDP. This was most likely the result of the Asian tiger economies' financial crisis. Rentier income was positive again by 1999 at about 10% of GDP. Rentier income in Mexico reached a peak in 1994 and then declined thereafter. This peak might be the result of the loosening of the restrictions on the financial sector that occurred around this time. See Figure III.1.10.

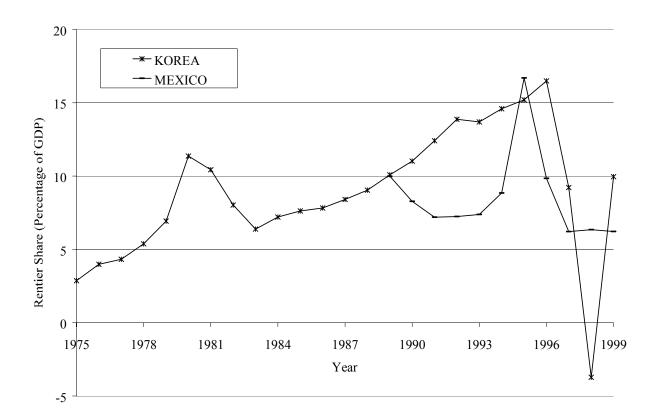


Figure III.1.10: Rentier Income Share in Korea and Mexico 1975-1999

Rentier income share in the Czech Republic, Hungary, and Poland increased slightly during 1993-1996 and then declined. In general, the trend of these three countries is declining. Rentier income share in Ireland increases during the four years for which it was reported, but these are insufficient data on which to draw a conclusion. See Figure III.1.11.

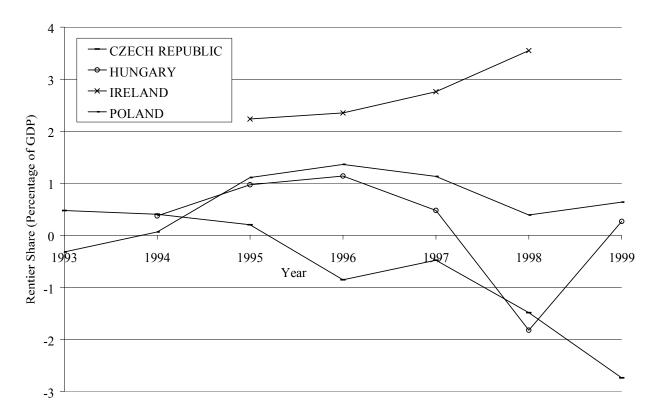


Figure III.1.11: Rentier Income Share in the Czech Republic, Hungary, Ireland, and Poland 1993-1999

Rentier income share in Turkey increased for most of the 1990's, but then falls dramatically beginning in 1996. Rentier income share in Iceland hits a peak low in 1992, when it is actually negative, and then grows dramatically through 1999 to higher than it had been at any point during the reporting period. Rentier income share in Iceland increased and decreased over the reporting period, but for the most part remained steady between 0.25% and 0.75% of GDP. See Figure III.1.12.

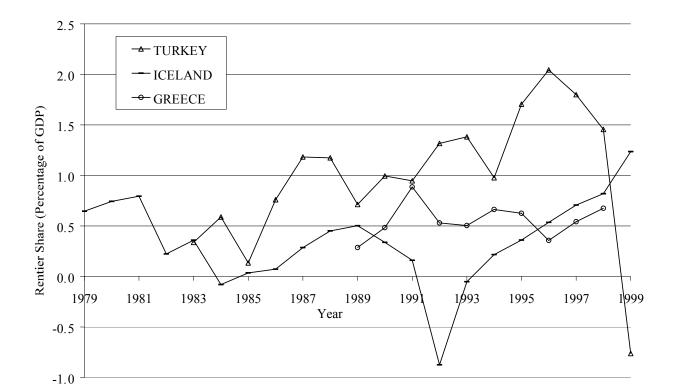


Figure III.1.12: Rentier Income Share in Turkey, Iceland, and Greece 1979-1999

### III.2 Components of Rentier Income Share

This section presents rentier income share broken into its components of financial sector profit and interest receivable by non-financial non-government resident institutional units as well as non-financial sector profit by country. Non-financial sector entrepreneurial income share data are included in this section for comparison to the financial sector profit share data. The data are presented in this section in both graphical and tabular format. See Appendix III for the data used to create the tables and figures.

For a number of countries, rentier income share appears alone. This is because no data on interest receivable by non-financial non-government resident institutional units were available. For these countries, rentier income share has been defined as financial sector profit share only interest receivable data were not available. For these countries, rentier income share is shown alone. This allows for easy viewing of the rentier income share data that are available for each individual country. Likewise, for a number of countries, non-financial sector profit share data were not available. Data on non-financial sector profit share data were not available.

The countries appear in alphabetical order.

Table III.2.1: Components of Rentier Income and Non-Financial Sector Profit Share: Australia 1968-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share	6.67	7.92	14.50	12.97
Financial Sector Profit Share	1.70	1.41	1.64	3.93
Non-Financial Sector Profit Share	12.66	8.10	5.24	7.91
Interest Income Share	4.97	6.50	12.87	9.04

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share	0.19	0.83	-0.11
Financial Sector Profit Share	-0.17	0.16	1.41
Non-Financial Sector Profit Share	-0.36	-0.35	0.51
Interest Income Share	0.31	0.98	-0.30

Figure III.2.1: Components of Rentier Income and Non-Financial Sector Profit Share: Australia 1968-1999

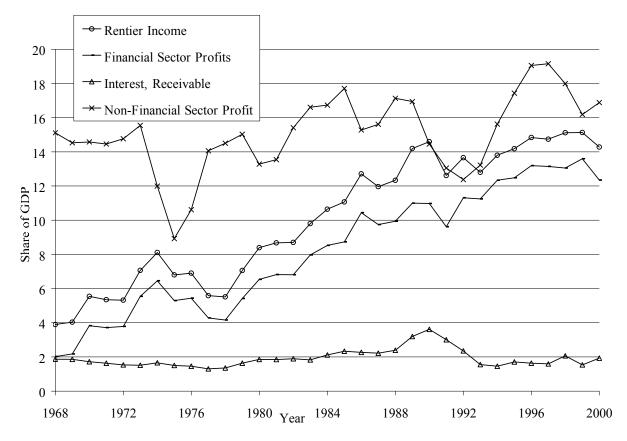


Table III.2.2: Rentier Income and Non-Financial Sector Profit Share: Austria 1987-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share			8.53	5.55
Financial Sector Profit Share			8.53	5.55
Non-Financial Sector Profit Share				13.49
Interest Income Share				

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share			-0.26
Financial Sector Profit Share			-0.35
Non-Financial Sector Profit Share			
Interest Income Share			

Figure III.2.2: Rentier Income and Non-Financial Sector Profit Share: Austria 1987-1999

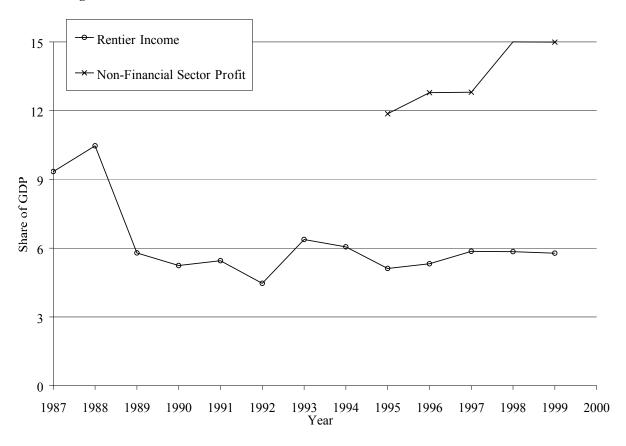


Table III.2.3: Components of Rentier Income and Non-Financial Sector Profit Share: Belgium 1970-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share		11.69	21.81	21.28
Financial Sector Profit Share		2.84	5.92	6.52
Non-Financial Sector Profit Share		11.66	12.92	14.66
Interest Income Share		8.85	15.89	14.75

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share		86.6%	-2.4%
Financial Sector Profit Share		108.9%	10.2%
Non-Financial Sector Profit Share		10.8%	13.5%
Interest Income Share		79.5%	-7.1%

Figure III.2.3: Components of Rentier Income and Non-Financial Sector Profit Share: Belgium 1970-1999

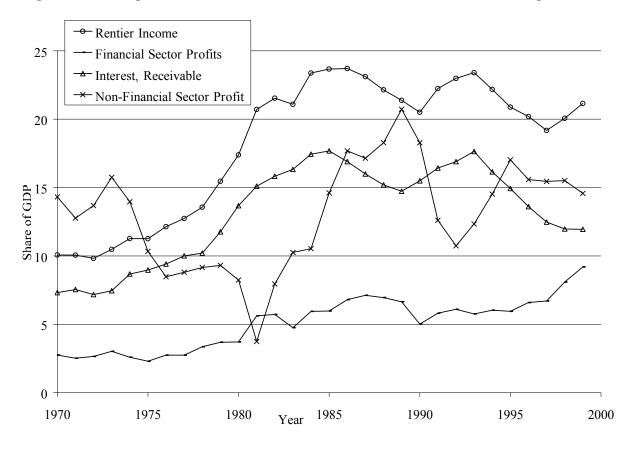


Table III.2.4: Components of Rentier Income Share: Canada 1982-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share			12.22	13.15
Financial Sector Profit Share			0.56	0.83
Non-Financial Sector Profit Share				
Interest Income Share			11.66	12.32

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share			7.6%
Financial Sector Profit Share			50.2%
Non-Financial Sector Profit Share			
Interest Income Share			5.6%

Figure III.2.4: Components of Rentier Income Share: Canada 1982-1999

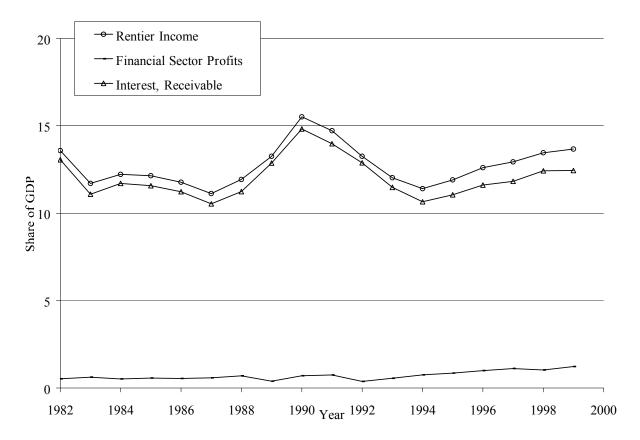


Table III.2.5: Rentier Income Share: Czech Republic 1993-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share				-0.64
Financial Sector Profit Share				-0.64
Non-Financial Sector Profit Share				
Interest Income Share				

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share			
Financial Sector Profit Share			
Non-Financial Sector Profit Share			
Interest Income Share			

Figure III.2.5: Rentier Income Share: Czech Republic 1993-1999

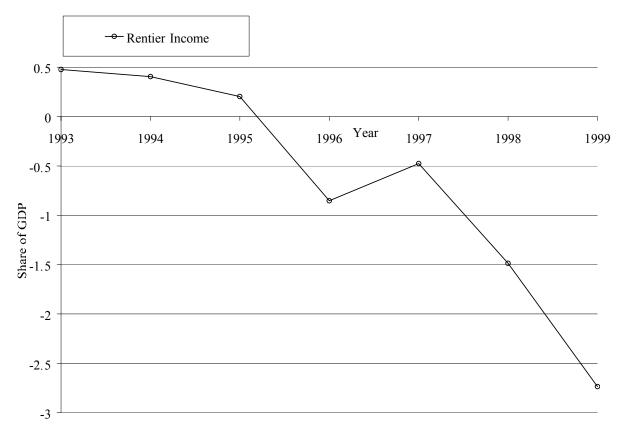


Table III.2.6: Components of Rentier Income and Non-Financial Sector Profit Share: Denmark 1971-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share		11.44	12.28	11.75
Financial Sector Profit Share		8.29	9.88	8.87
Non-Financial Sector Profit Share			6.45	16.05
Interest Income Share		3.15	2.40	2.88

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share		7.4%	-4.3%
Financial Sector Profit Share		19.1%	-10.2%
Non-Financial Sector Profit Share			149.0%
Interest Income Share		-23.7%	20.0%

Figure III.2.6: Components of Rentier Income and Non-Financial Sector Profit Share: Denmark 1971-1999

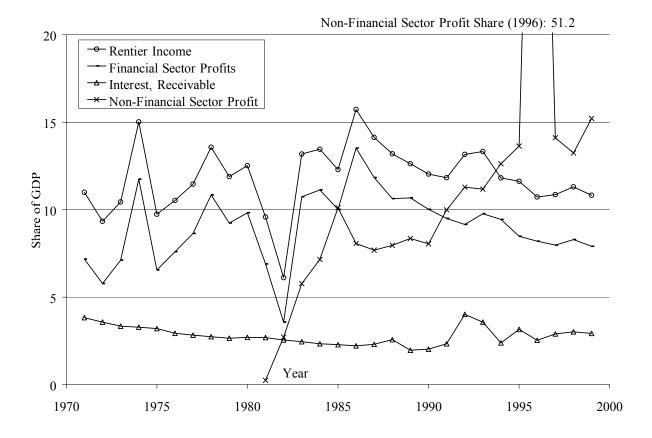


Table III.2.7: Components of Rentier Income and Non-Financial Sector Profit Share: Finland 1960-2000

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share	5.61	6.04	6.58	8.75
Financial Sector Profit Share	3.16	3.06	1.66	2.71
Non-Financial Sector Profit Share	14.28	7.37	6.72	10.56
Interest Income Share	2.45	2.98	4.92	6.04

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share	7.7%	8.9%	33.0%
Financial Sector Profit Share	-3.1%	-45.8%	63.1%
Non-Financial Sector Profit Share	-48.4%	-8.8%	57.2%
Interest Income Share	21.6%	65.0%	22.8%

Figure III.2.7: Components of Rentier Income and Non-Financial Sector Profit Share: Finland 1960-2000

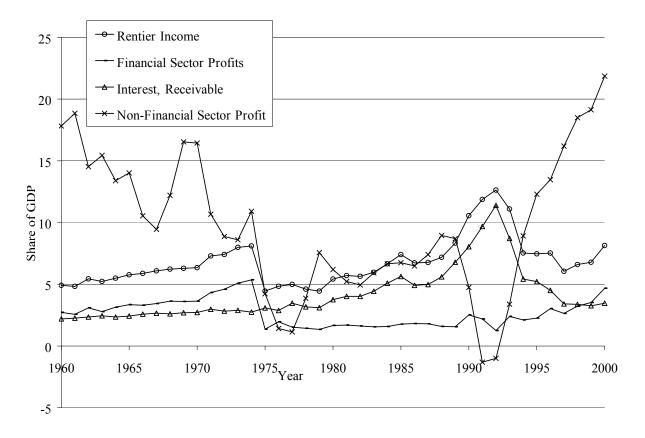


Table III.2.8: Components of Rentier Income and Non-Financial Sector Profit Share: France 1970-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share		6.24	10.62	21.19
Financial Sector Profit Share		2.44	4.45	14.45
Non-Financial Sector Profit Share		6.39	5.97	11.07
Interest Income Share		3.79	6.18	6.73

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share		70.3%	99.4%
Financial Sector Profit Share		82.0%	225.0%
Non-Financial Sector Profit Share		-6.7%	85.6%
Interest Income Share		62.8%	9.0%

Figure III.2.8: Components of Rentier Income and Non-Financial Sector Profit Share: France 1970-1999

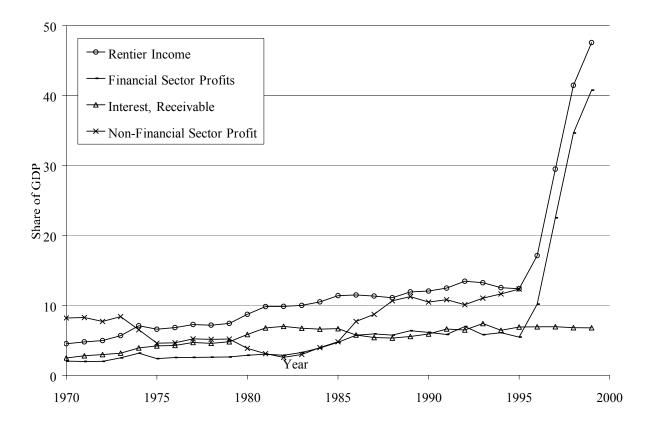


Table III.2.9: Components of Rentier Income and Non-Financial Sector Profit Share: Germany 1960-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share	2.98	5.02	7.83	7.43
Financial Sector Profit Share	2.57	4.21	6.63	6.31
Non-Financial Sector Profit Share	16.23	12.09	9.80	11.16
Interest Income Share	0.41	0.81	1.20	1.12

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share	68.3%	56.1%	-5.1%
Financial Sector Profit Share	64.0%	57.6%	-4.8%
Non-Financial Sector Profit Share	-25.5%	-19.0%	14.0%
Interest Income Share	94.3%	48.5%	-6.2%

Figure III.2.9: Components of Rentier Income and Non-Financial Sector Profit Share: Germany 1960-2000

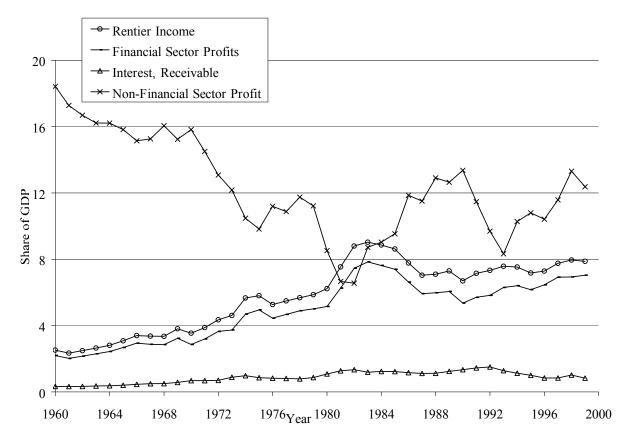


Table III.2.10: Rentier Income Share: Greece 1989-1998

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share			0.29	0.59
Financial Sector Profit Share			0.29	0.59
Non-Financial Sector Profit Share				
Interest Income Share				

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share			103.7%
Financial Sector Profit Share			103.7%
Non-Financial Sector Profit Share			
Interest Income Share			

Figure III.2.10: Rentier Income Share: Greece 1989-1998

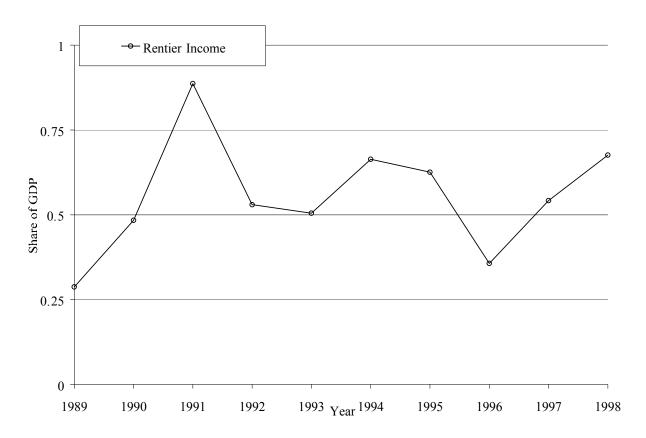


Table III.2.11: Rentier Income Share: Hungary 1994-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share				0.24
Financial Sector Profit Share				0.24
Non-Financial Sector Profit Share				
Interest Income Share				

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share			
Financial Sector Profit Share			
Non-Financial Sector Profit Share			
Interest Income Share			

Figure III.2.11: Rentier Income Share: Hungary 1994-1999

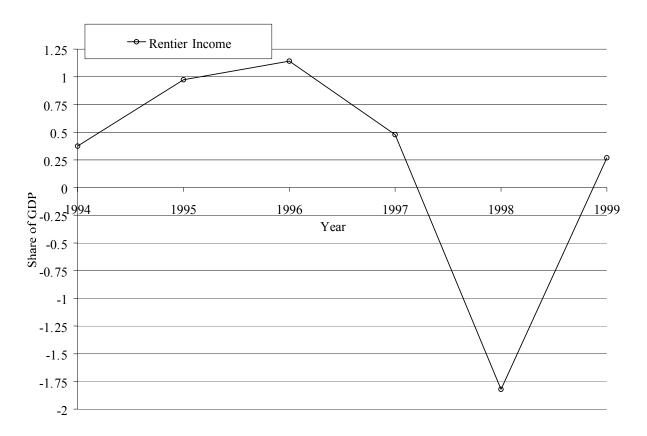


Table III.2.12: Rentier Income Share: Iceland 1979-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share		0.65	0.34	0.34
Financial Sector Profit Share		0.65	0.34	0.34
Non-Financial Sector Profit Share				
Interest Income Share				

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share		-47.6%	1.7%
Financial Sector Profit Share		-47.6%	1.7%
Non-Financial Sector Profit Share			
Interest Income Share			

Figure III.2.12: Rentier Income Share: Iceland 1979-1999

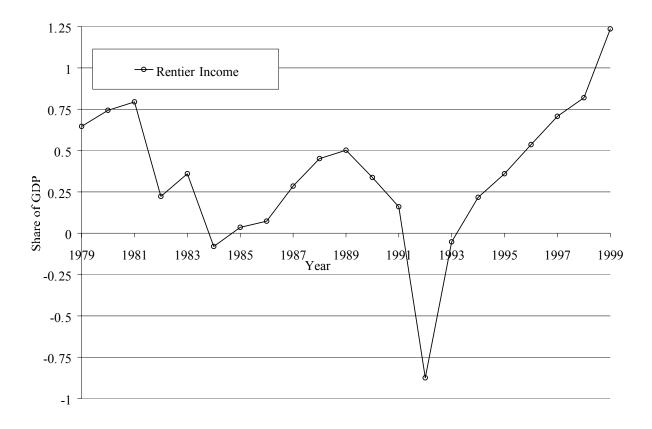


Table III.2.13: Rentier Income Share: Ireland 1995-1998

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share				2.72
Financial Sector Profit Share				2.72
Non-Financial Sector Profit Share				
Interest Income Share				

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share			
Financial Sector Profit Share			
Non-Financial Sector Profit Share			
Interest Income Share			

Figure III.2.13: Rentier Income Share: Ireland 1995-1998

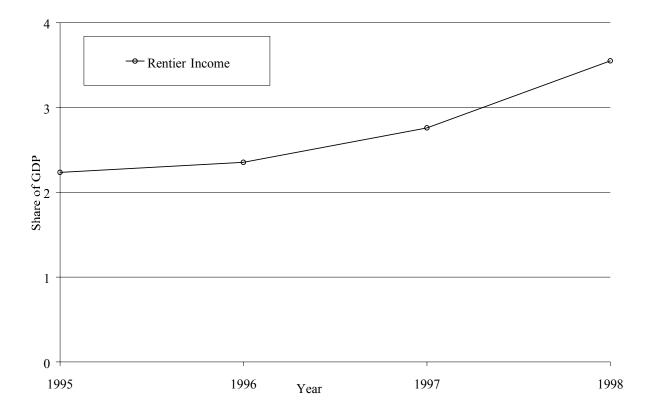


Table III.2.14: Components of Rentier Income and Non-Financial Sector Profit Share: Italy 1980-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share			18.77	18.08
Financial Sector Profit Share			4.82	4.74
Non-Financial Sector Profit Share			11.68	16.12
Interest Income Share			13.95	13.35

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share			-3.7%
Financial Sector Profit Share			-1.7%
Non-Financial Sector Profit Share			38.1%
Interest Income Share			-4.3%

Figure III.2.14: Components of Rentier Income and Non-Financial Sector Profit Share: Italy 1980-1999

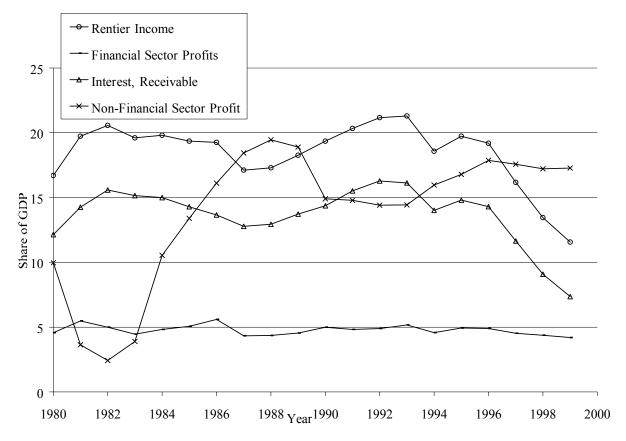


Table III.2.15: Components of Rentier Income and Non-Financial Sector Profit Share: Japan 1960-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share	9.00	12.30	14.27	11.22
Financial Sector Profit Share	2.31	2.92	3.09	4.34
Non-Financial Sector Profit Share	11.96	9.02	9.91	8.25
Interest Income Share	6.68	9.38	11.18	6.88

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share	36.7%	16.1%	-21.4%
Financial Sector Profit Share	26.1%	6.0%	40.3%
Non-Financial Sector Profit Share	-24.6%	9.8%	-16.7%
Interest Income Share	40.3%	19.2%	-38.5%

Figure III.2.15: Components of Rentier Income and Non-Financial Sector Profit Share: Japan 1960-1999

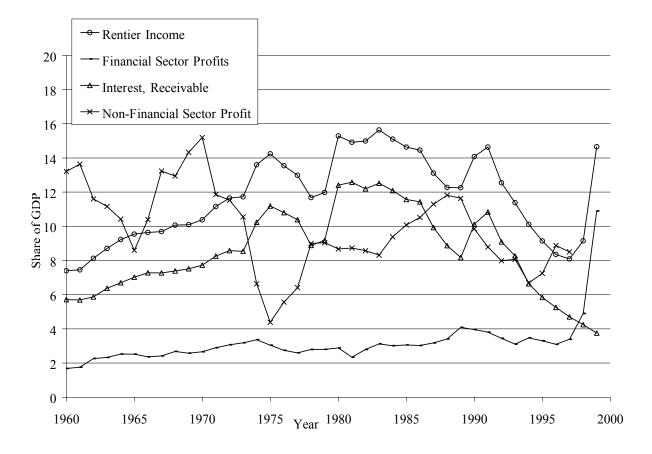


Table III.2.16: Components of Rentier Income and Non-Financial Sector Profit Share: Korea 1975-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share		4.69	8.64	11.28
Financial Sector Profit Share		1.66	1.89	-2.43
Non-Financial Sector Profit Share		7.32	7.93	8.23
Interest Income Share		3.03	6.75	13.70

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share		84.0%	30.5%
Financial Sector Profit Share		13.5%	-228.5%
Non-Financial Sector Profit Share		8.3%	3.9%
Interest Income Share		122.8%	103.0%

Figure III.2.16: Components of Rentier Income and Non-Financial Sector Profit Share: Korea 1975-1999

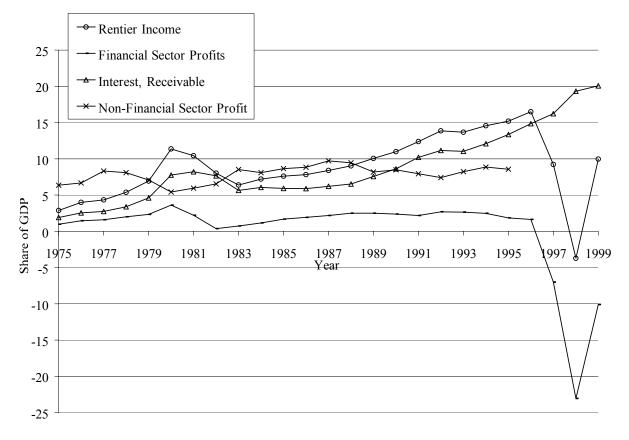


Table III.2.17: Rentier Income Share: Luxembourg 1979-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share		6.14	6.43	12.41
Financial Sector Profit Share		6.14	6.43	12.41
Non-Financial Sector Profit Share				
Interest Income Share				

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share		4.6%	93.0%
Financial Sector Profit Share		4.6%	93.0%
Non-Financial Sector Profit Share			
Interest Income Share			

Figure III.2.17: Rentier Income Share: Luxembourg 1979-1999

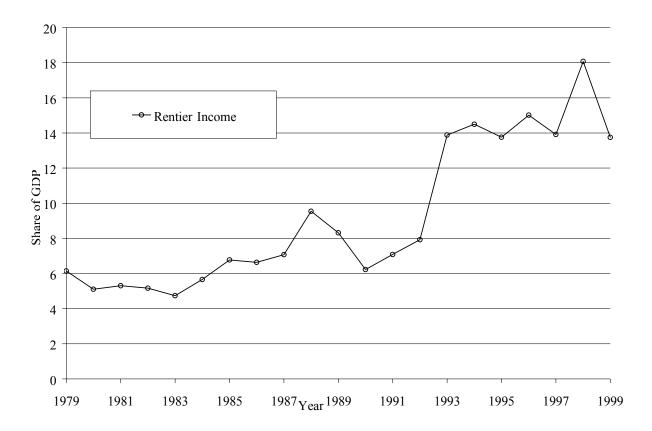


Table III.2.18: Components of Rentier Income and Non-Financial Sector Profit Share: Mexico 1989-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share			1.52	6.74
Financial Sector Profit Share			1.52	2.36
Non-Financial Sector Profit Share				23.92
Interest Income Share				6.26

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share			344.7%
Financial Sector Profit Share			55.8%
Non-Financial Sector Profit Share			
Interest Income Share			

Figure III.2.18: Components of Rentier Income and Non-Financial Sector Profit Share: Mexico 1989-1999

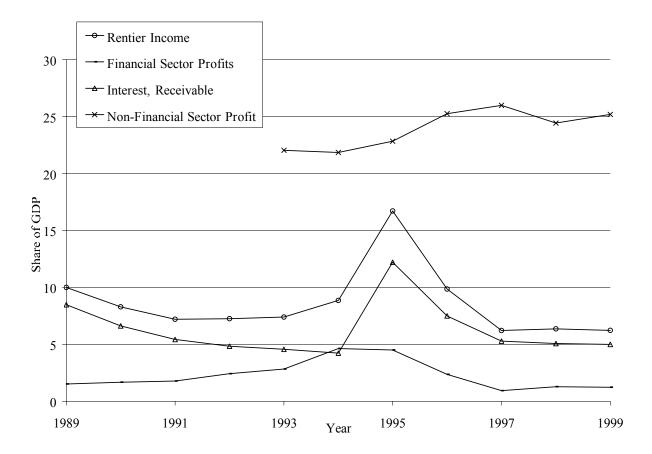


Table III.2.19: Components of Rentier Income and Non-Financial Sector Profit Share:

Netherlands 1977-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share		13.47	18.69	20.97
Financial Sector Profit Share		9.26	12.69	14.74
Non-Financial Sector Profit Share		9.86	13.06	15.33
Interest Income Share		4.21	6.00	6.23

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share		38.7%	12.2%
Financial Sector Profit Share		37.0%	16.2%
Non-Financial Sector Profit Share		32.4%	17.3%
Interest Income Share		42.4%	3.9%

Figure III.2.19: Components of Rentier Income and Non-Financial Sector Profit Share:

Netherlands 1977-1999

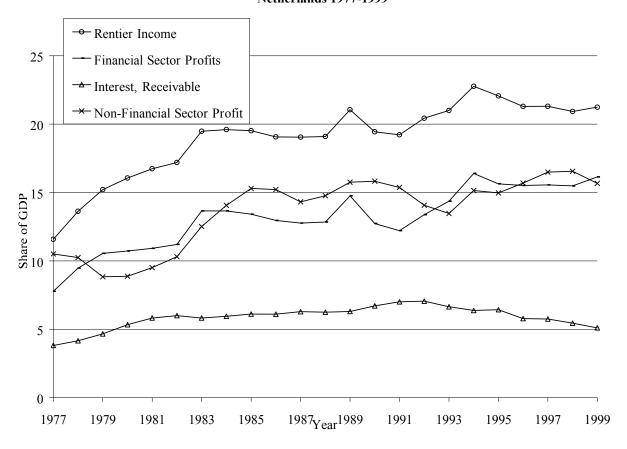


Table III.2.20: Components of Rentier Income Share: New Zealand 1990-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share				7.71
Financial Sector Profit Share				1.11
Non-Financial Sector Profit Share				
Interest Income Share				6.60

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share			
Financial Sector Profit Share			
Non-Financial Sector Profit Share			
Interest Income Share			

Figure III.2.20: Components of Rentier Income Share: New Zealand 1990-1999

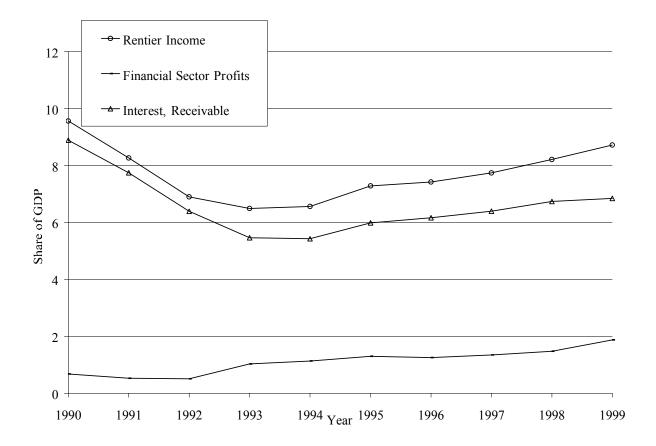


Table III.2.21: Components of Rentier Income and Non-Financial Sector Profit Share: Norway 1978-2000

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share		6.03	10.45	9.56
Financial Sector Profit Share		3.11	5.31	5.83
Non-Financial Sector Profit Share		10.74	12.44	15.20
Interest Income Share		2.91	5.14	3.73

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share		73.3%	-8.5%
Financial Sector Profit Share		70.6%	9.7%
Non-Financial Sector Profit Share		15.8%	22.2%
Interest Income Share		76.3%	-27.4%

Figure III.2.21: Components of Rentier Income and Non-Financial Sector Profit Share: Norway 1978-2000

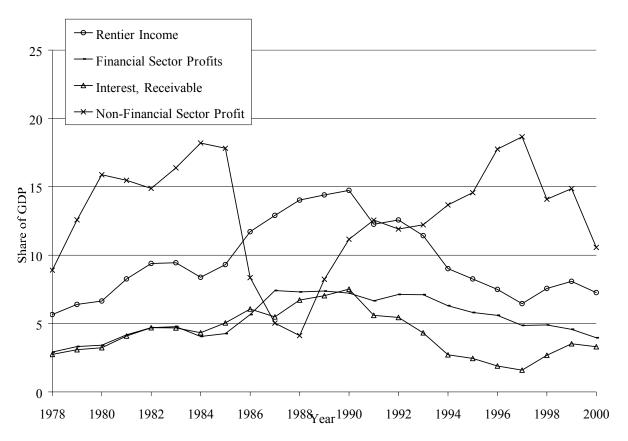


Table III.2.22: Rentier Income Share: Poland 1993-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share				0.63
Financial Sector Profit Share				0.63
Non-Financial Sector Profit Share				
Interest Income Share				

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share			
Financial Sector Profit Share			
Non-Financial Sector Profit Share			
Interest Income Share			

Figure III.2.22: Rentier Income Share: Poland 1993-1999

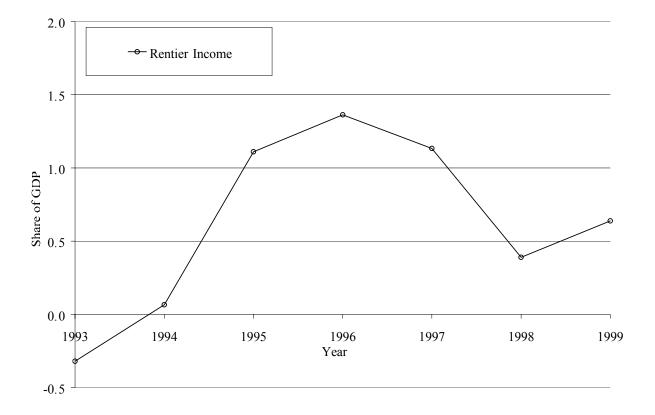


Table III.2.23: Components of Rentier Income and Non-Financial Sector Profit Share: Portugal 1979-1998

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share			15.92	16.90
Financial Sector Profit Share			2.08	4.07
Non-Financial Sector Profit Share			14.90	11.87
Interest Income Share			13.84	12.84

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share			6.1%
Financial Sector Profit Share			95.6%
Non-Financial Sector Profit Share	-		-20.3%
Interest Income Share			-7.3%

Figure III.2.23: Components of Rentier Income and Non-Financial Sector Profit Share: Portugal 1979-1998

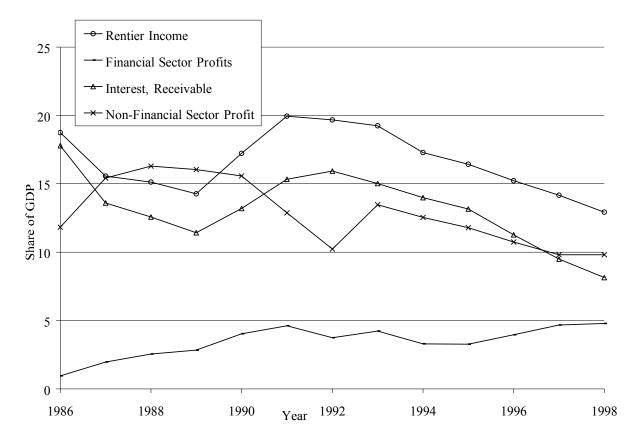


Table III.2.24: Components of Rentier Income and Non-Financial Sector Profit Share: Spain 1979-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share		14.47	12.53	13.21
Financial Sector Profit Share		3.31	3.87	5.51
Non-Financial Sector Profit Share			8.70	9.22
Interest Income Share		11.16	8.66	7.70

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share		-13.4%	5.4%
Financial Sector Profit Share		17.1%	42.4%
Non-Financial Sector Profit Share			5.9%
Interest Income Share		-22.4%	-11.2%

Figure III.2.24: Components of Rentier Income and Non-Financial Sector Profit Share: Spain 1979-1999

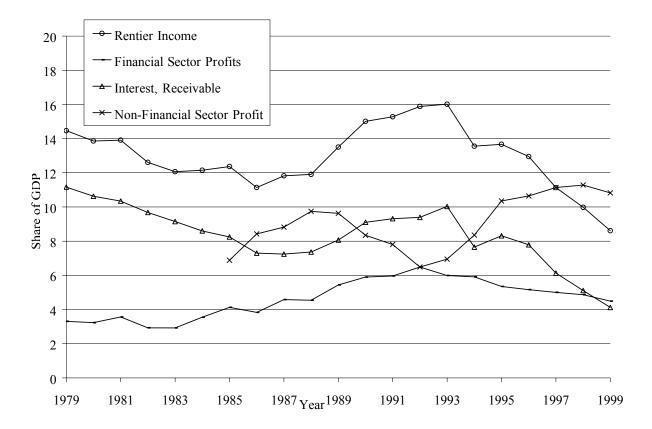


Table III.2.25: Components of Rentier Income and Non-Financial Sector Profit Share: Sweden 1979-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share		13.61	12.34	12.30
Financial Sector Profit Share		7.85	8.56	9.41
Non-Financial Sector Profit Share			2.95	5.51
Interest Income Share		5.76	3.78	2.90

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share		-9.4%	-0.3%
Financial Sector Profit Share		9.1%	9.9%
Non-Financial Sector Profit Share			86.8%
Interest Income Share		-34.4%	-23.3%

Figure III.2.25: Components of Rentier Income and Non-Financial Sector Profit Share: Sweden 1979-1999

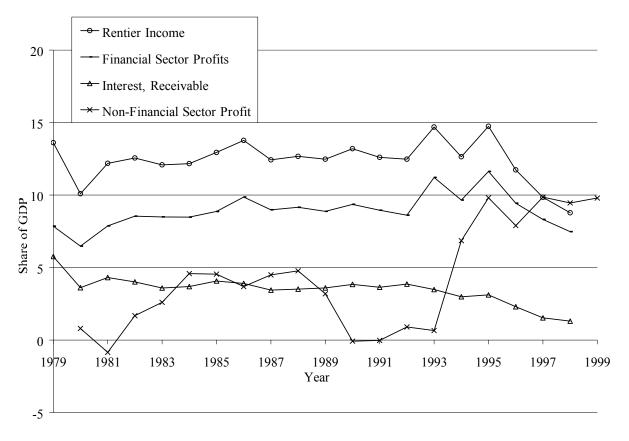


Table III.2.26: Rentier Income and Non-Financial Sector Profit Share: Switzerland 1979-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share		5.61	7.34	9.14
Financial Sector Profit Share		5.61	7.34	9.14
Non-Financial Sector Profit Share				7.34
Interest Income Share				

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share		30.7%	24.6%
Financial Sector Profit Share		30.7%	24.6%
Non-Financial Sector Profit Share			
Interest Income Share			

Figure III.2.26: Rentier Income and Non-Financial Sector Profit Share: Switzerland 1979-1999

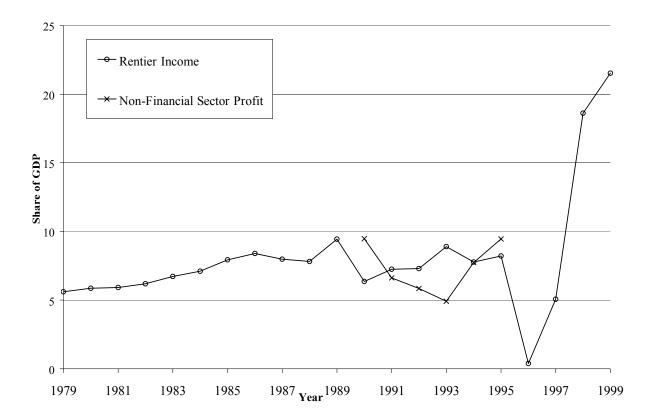


Table III.2.27: Rentier Income Share: Turkey 1983-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share			0.70	1.19
Financial Sector Profit Share			0.70	1.19
Non-Financial Sector Profit Share				
Interest Income Share				

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share			69.8%
Financial Sector Profit Share			69.8%
Non-Financial Sector Profit Share			
Interest Income Share			

Figure III.2.27: Rentier Income Share: Turkey 1983-1999

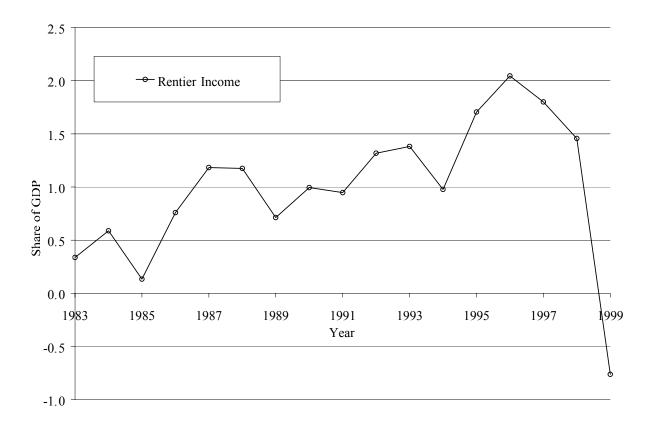


Table III.2.28: Components of Rentier Income and Non-Financial Sector Profit Share:
United Kingdom 1968-2000

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share	3.97	6.33	10.85	14.16
Financial Sector Profit Share	2.10	4.79	8.65	12.12
Non-Financial Sector Profit Share	14.82	13.45	15.83	15.95
Interest Income Share	1.87	1.53	2.20	2.04

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share	59.5%	71.5%	30.5%
Financial Sector Profit Share	128.4%	80.5%	40.1%
Non-Financial Sector Profit Share	-9.3%	17.7%	0.8%
Interest Income Share	-17.9%	43.3%	-7.0%

Figure III.2.28: Components of Rentier Income and Non-Financial Sector Profit Share:
United Kingdom 1968-2000

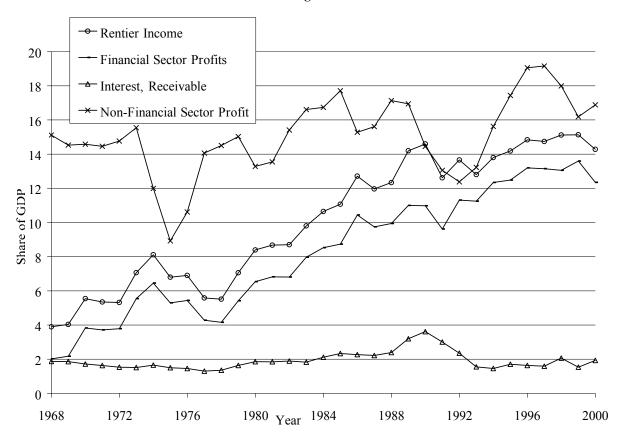


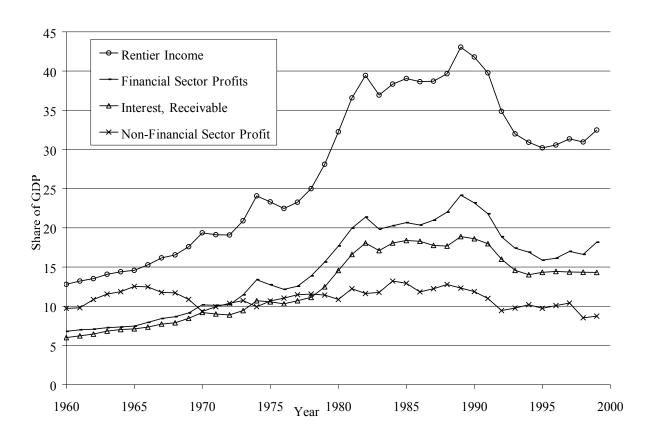
Table III.2.29: Components of Rentier Income and Non-Financial Sector Profit Share:

United States 1960-1999

Decade Averages	1960's	1970's	1980's	1990's
Rentier Income Share	14.81	22.47	38.26	33.49
Financial Sector Profit Share	7.71	12.23	20.73	18.19
Non-Financial Sector Profit Share	11.31	10.65	12.18	9.97
Interest Income Share	7.10	10.24	17.54	15.30

Percentage Change in Decade Averages	1960's-1970's	1970's-1980's	1980's-1990's
Rentier Income Share	51.7%	70.3%	-12.5%
Financial Sector Profit Share	58.6%	69.5%	-12.2%
Non-Financial Sector Profit Share	-5.9%	14.4%	-18.1%
Interest Income Share	44.2%	71.2%	-12.8%

Figure III.2.29: Components of Rentier Income and Non-Financial Sector Profit Share:
United States 1960-1999



#### IV. DATA: RENTIER INCOME SHARE INCLUDING CAPITAL GAINS ON FINANCIAL ASSETS

This section presents rentier income share data including capital gains on financial assets as a share of GDP. In section III, rentier income share did not include this very important component of rentier income share due to limited availability of capital gains on financial assets data and due to uncertainty of the quality of the resulting rentier income share series. This section reports the rentier income share incorporating the capital gains on financial assets data. All capital gains on financial assets data used in this paper have been estimated. Section IV.1 describes briefly how capital gains on financial assets were estimated. Refer to Section V.3 for additional information.

Capital gains on financial assets are an important component of rentier income. Rentier income without this component displayed a fairly stable or even decreasing trend for most countries well into the 1990's. In this section, the inclusion of capital gains on financial assets significantly changes the trend of the rentier income share. In most countries, rentier income share becomes much more volatile. More importantly, some countries for which rentier income share was decreasing or stable in the late 1990's now reflect upward-sloping rentier income share trends. Section IV.2: Overall Trends in Rentier Income Share Including Capital Gains in Financial Assets outlines these trends in more detail.

Because capital gains are not ordinarily counted as part of GDP, capital gains have been added to GDP in the denominator. The countries are ordered according to the same principle as above, where countries that share a general trend, though not an exact trend, are grouped together. Countries with similar trends of rentier income share in the last section do not necessarily have similar trends after capital gains on financial assets were added.

## IV.1: Computation of Capital Gains on Financial Assets

Capital gains on financial assets have been computed according to Equation IV.1. They are the difference between the value of the stock of financial assets in the current period less the stock of financial assets in the previous period less the value of new issues in the current period. Data on new issues are not available, so new issues are estimated by saving in the current period times the ratio of the stock of financial assets to total wealth. This is given by Equation IV.1.

## **Equation IV.1: Calculation of Capital Gains**

$$CG = FA_t - FA_{t-1} - S_t * \frac{FA_t}{FA_t + K_t}$$

where CG = capital gains on financial assets

FA = stock of financial assets

S = gross savings

K = gross capital stock

Refer to Section V.3 for additional information on this formula and on how capital gains on financial assets were calculated.

In order to check the robustness of Equation IV.1, capital gains on financial assets in the United States have been computed using data from the Flow of Funds Accounts. Figure IV.1 shows capital gains on financial assets calculated two ways using data from the Flow of Funds Accounts and according to the formula given in Equation IV.1. It is clear that while the computation given by the formula tends to understate capital gains on financial assets, the trend is very much the same over the two methods.

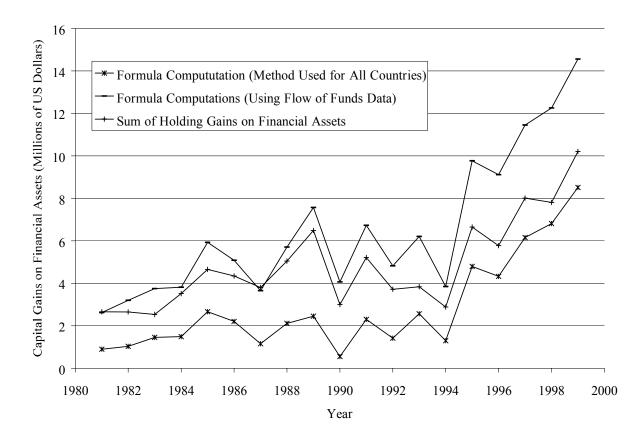
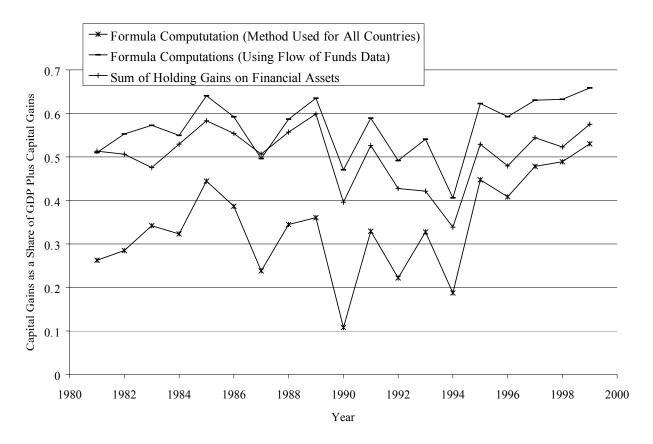


Figure IV.1.1: Capital Gains on Financial Assets in the United States 1945-1999

Figure IV.2 shows a comparison of the two methods of computing rentier income share based on the two methods of computing capital gains on financial assets. It is clear that while the rentier income share is slightly understated using the formula method as opposed to the Flow of Funds data, the trends are very much the same. Thus, we may proceed with some confidence that the capital gains on financial assets data and the resulting rentier income share data reported in this section may be a fairly accurate reflection of the trends of rentier income share.

Figure IV.1.2: Rentier income share Calculated Using Two Measures of Capital Gains on Financial Assets: United States 1960-1999



## IV.2: Overall Trends in Rentier Income Share Including Capital Gains on Financial Assets

This section shows the rentier income share data including capital gains on financial assets. Table IV.2.1 summarizes the rentier income share data including capital gains on financial assets. Figures IV.2.1 - IV.2.5 show these data for all of the countries for which capital gains on financial assets data were available. It is clear that the number of countries for which these data are available is considerably less than the number of countries for which financial sector profit and interest receivable data are available. It is also clear that the addition of the capital gains on financial assets share data changed considerably the trends of rentier income share in every country.

Table IV.2.1: RENTIER INCOME SHARE INCLUDING CAPITAL GAINS ON FINANCIAL ASSETS IN SOME OECD COUNTRIES

		Decade Average	Decade Average	Percentage Change over the Period 1980s and
Country	Years Reported	1980s	1990s	1990s
AUSTRALIA	1989 - 1998	35.02	33.81	-3.44%
AUSTRIA				
BELGIUM	1981 - 1999	46.69	47.08	0.83%
CANADA	1982 - 1998	34.16	34.66	1.46%
CZECH				
REPUBLIC				
DENMARK	1995 - 1999		42.30	
FINLAND				
FRANCE	1981 - 1997	37.73	26.53	-29.68%
GERMANY	1981 - 1996	22.51	25.86	14.87%
GREECE				
HUNGARY				
ICELAND				
IRELAND				
ITALY	1992 - 1999		39.69	
JAPAN	1990 - 1991	32.21	2.80	-91.32%
KOREA	1981 - 1998	41.40	72.14	74.25%
LUXEMBOURG				
MEXICO	1989 - 1999		98.95	
NETHERLANDS				
NEW ZEALAND				
NORWAY	1981 - 1995	37.22	14.25	-61.71%
POLAND				
PORTUGAL	1996 - 1998		48.77	
SPAIN	1981 - 1998	39.28	42.68	8.63%
SWEDEN	1991 - 1998		37.54	
SWITZERLAND				
TURKEY				
UK	1981 - 1997	48.96	46.24	-5.55%
US	1981 - 1999	58.94	59.19	0.43%

Rentier income share including capital gains on financial assets displays different trends for each country. For most countries, the inclusion of capital gains on financial assets causes rentier income share to increase through the 1990s and grow larger toward the end of the 1990s. This indicates that capital gains on financial assets had an increasing level of importance during the mid- to late- 1990s. See Figure IV.2.1.

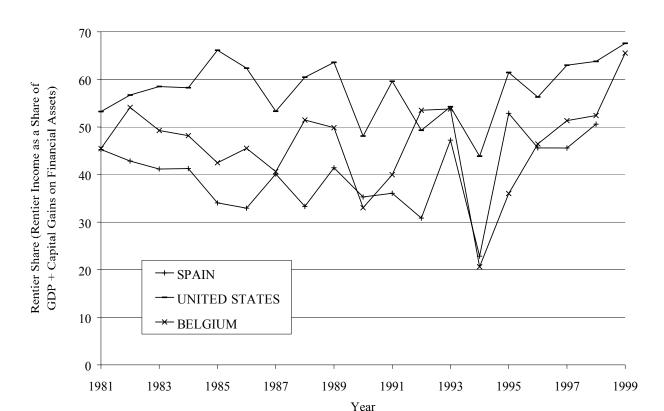


Figure IV.2.1: Rentier Income Share in the United States, Spain, and Belgium 1981-1999

Rentier income share in some countries decreases with the inclusion of capital gains on financial assets. In the United Kingdom, for example, rentier income without capital gains on financial assets was upward-sloping. After the inclusion of capital gains on financial assets, the rentier income share is extremely high at 40%-60% of GDP during the 1980's and between -10% and 60% during the 1990's. Rentier income share in Norway is between 30% and 50% of GDP during the 1980's and between -10% and 30% during the 1990's. It is also more volatile in the 1990's. Similarly, rentier income share in Germany is steadily decreasing during the 1980's. During the 1990's, it becomes more volatile, spiking in 1990, and falling thereafter. See Figure IV.2.2.

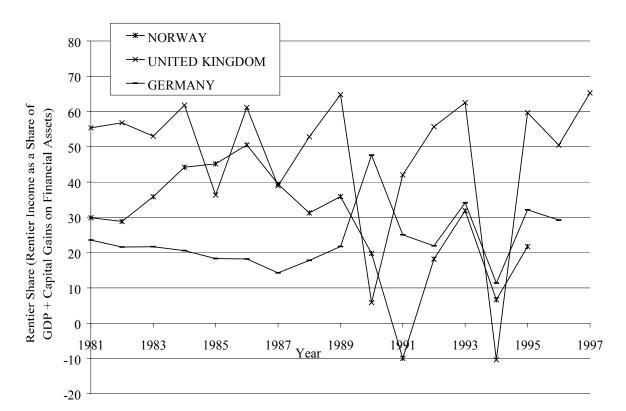


Figure IV.2.2: Rentier Income Share in Norway, United Kingdom, and Germany 1981-1997

Rentier income share in France conforms to the pattern of relative stability in the 1980's and relative volatility in the 1990's. Before the inclusion of capital gains on financial assets, rentier income share in France was low up until the mid-1990's, when it spiked to about 50% of GDP. After capital gains on financial assets are added, rentier income share hovers between 20% and 60% of GPD. After 1990, rentier income share is between -80% and about 60% of GDP. The trend of France is generally negative in the 1990's, in stark contrast to the trend before the inclusion of capital gains on financial assets. Rentier income share in Denmark generally declined over the reporting period as well. Rentier income share not including capital gains in Denmark declined, and while rentier income share including capital gains declined over the period 1995-1999, the losses here are smaller in magnitude. See Figure IV.2.3.

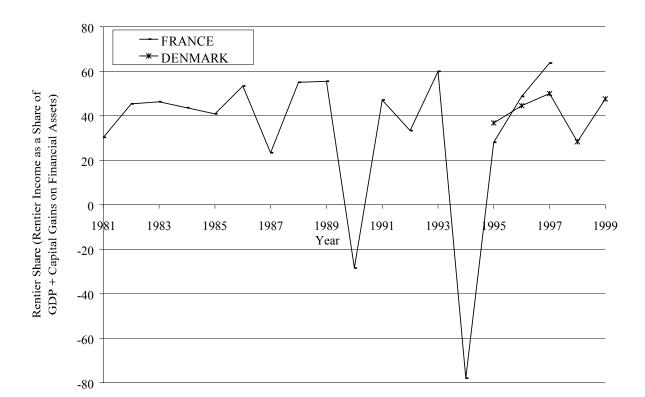


Figure IV.2.3: Rentier Income Share in France and Denmark 1981-1999

Rentier income share in Australia and Canada remains relatively constant after the inclusion of capital gains on financial assets. Rentier income share in Canada remains between 30% and 40% of GDP with the exception of 1982 and 1983. Before the inclusion of capital gains on financial assets, rentier income in Canada remained around 15% of GDP. Surprisingly, capital gains on financial assets do not make rentier income share in Canada volatile. Rentier income share in Australia before the inclusion of capital gains on financial assets rose until 1989 when it peaked, and fell thereafter. After the inclusion of capital gains on financial assets, rentier income share fell until 1994, when it picked up to reach 40% at the end of the reporting period. See Figure IV.2.4.

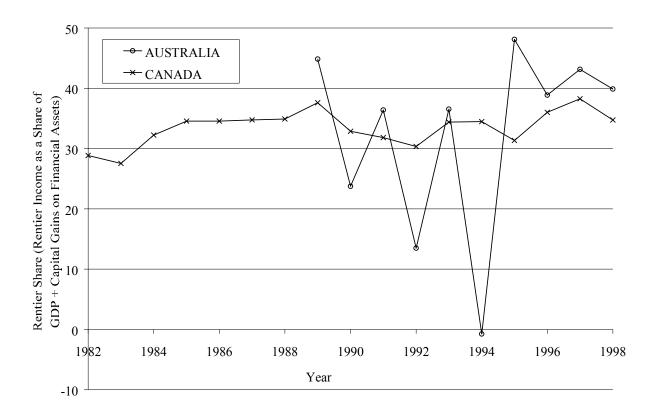


Figure IV.2.4: Rentier Income Share in Australia and Canada 1982-1998

Rentier income share including capital gains on financial assets in Sweden, Italy, and Portugal rose during the 1990's. It was especially volatile in Sweden, where it ranged between 10% and 65% of GDP. Rentier income share in Italy ranged between 20% and 45% of GDP. Rentier income share in Portugal rose during the three years for which it was reported. See Figure IV.2.5.

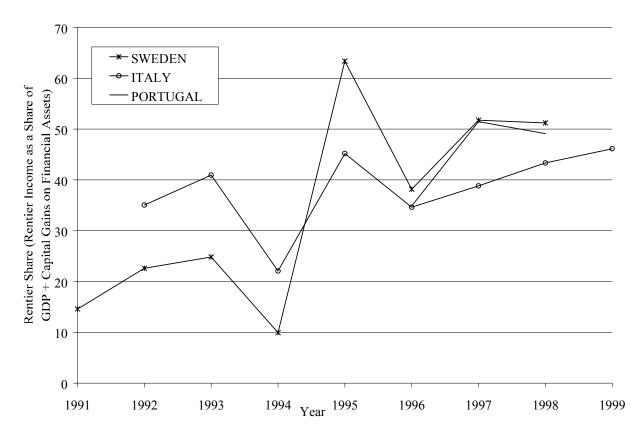


Figure IV.2.5: Rentier Income Share in Sweden, Italy, and Portugal 1991-1999

Rentier income share including capital gains on financial assets in Korea fell during the early- and mid-1980's, rose in the late 1980's, fell in the early 1990's and rose again in the late 1990's. Rentier income share fell again in 1998, but this is most likely the result of the Asian financial crisis. See Figure IV.2.6.

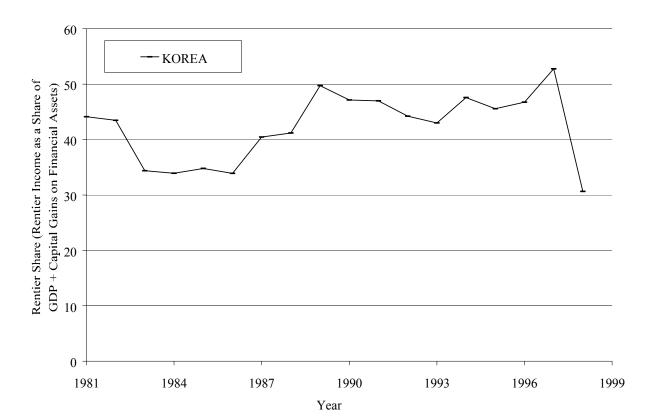


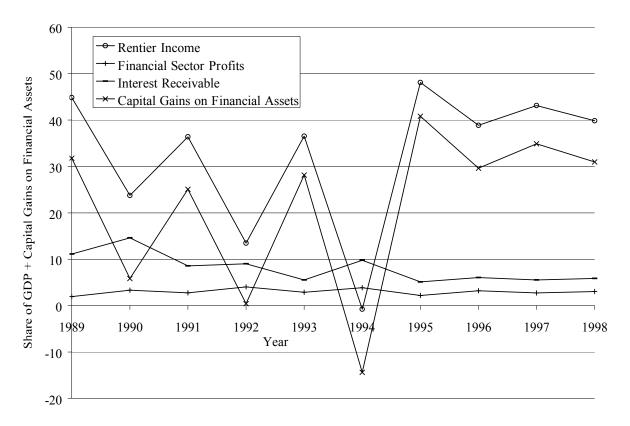
Figure IV.2.6: Rentier Income Share in Korea 1981-1999

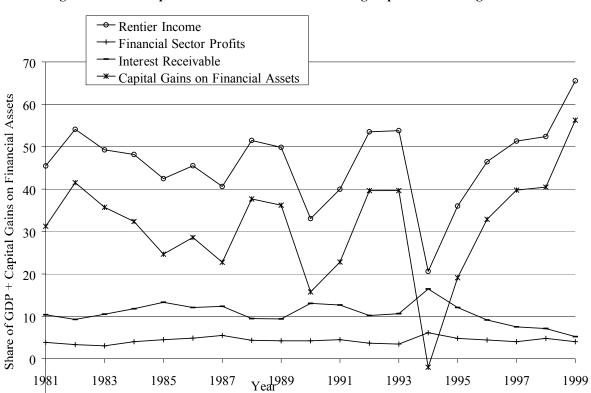
# IV.3Individual Country Figures with Capital Gains on Financial Assets

This section presents rentier income share including capital gains on financial assets broken into its components of financial sector profit, interest receivable by non-financial non-government resident institutional units, and capital gains on financial assets all as shares of GDP. The data are presented in this section in graphical format only. See Appendix III for the data used to create the tables and figures.

The countries appear in alphabetical order.

Figure IV.3.1: Components of Rentier Income Including Capital Gains: Australia 1989-1998





-10

Figure IV.3.2: Components of Rentier Income Including Capital Gains: Belgium 1981-1999



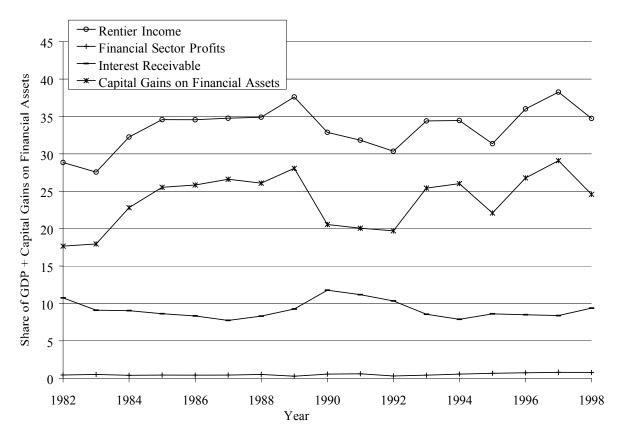
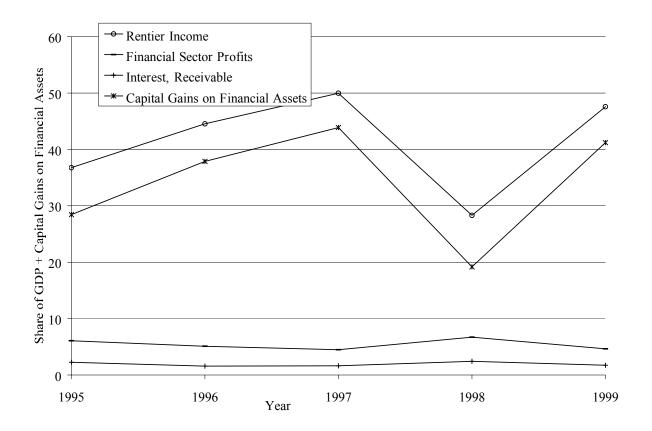


Figure IV.3.4: Components of Rentier Income Including Capital Gains: Denmark 1995-1999



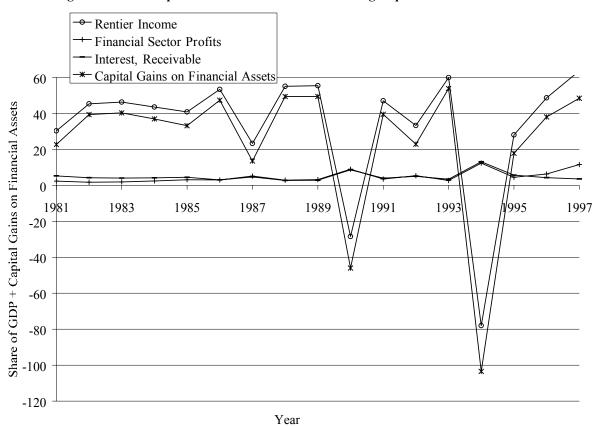
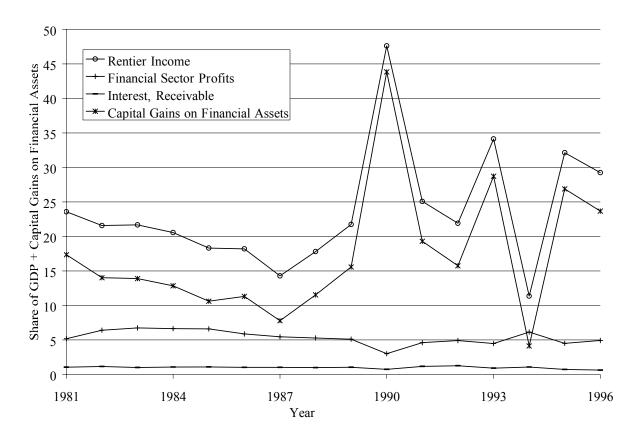
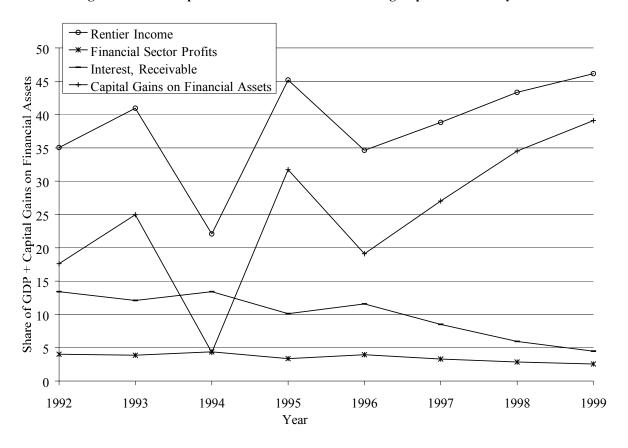


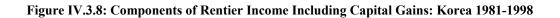
Figure IV.3.5: Components of Rentier Income Including Capital Gains: France 1981-1997

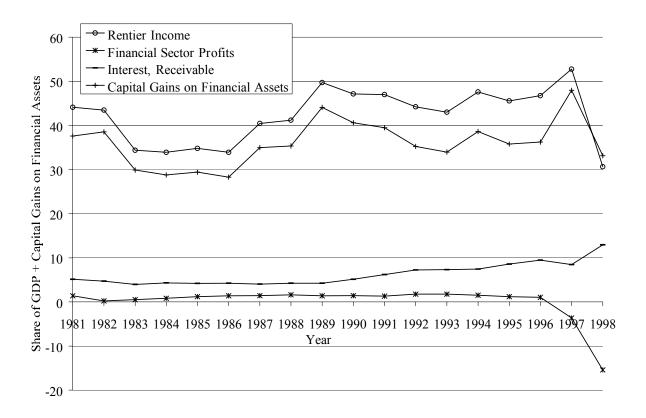
Figure IV.3.6: Components of Rentier Income Including Capital Gains: Germany 1981-1996



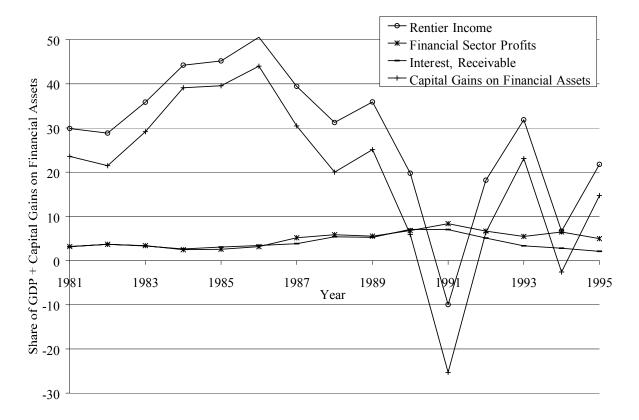














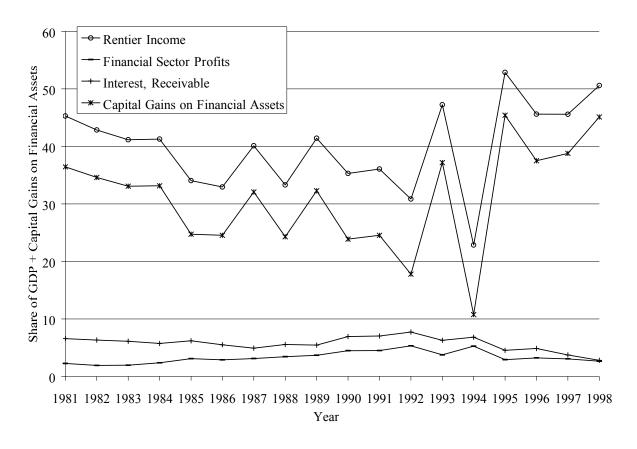


Figure IV.3.11: Components of Rentier Income Including Capital Gains: Sweden 1991-1998

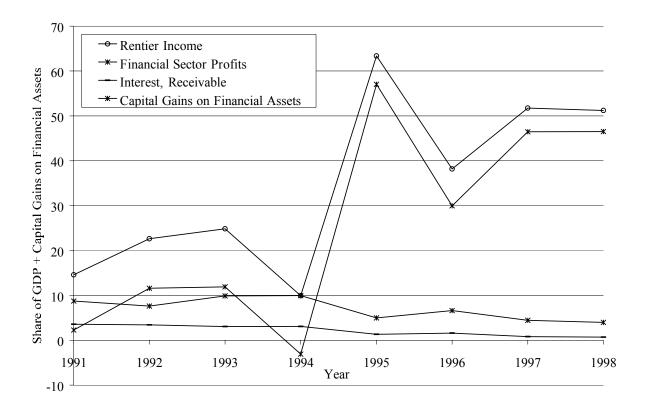
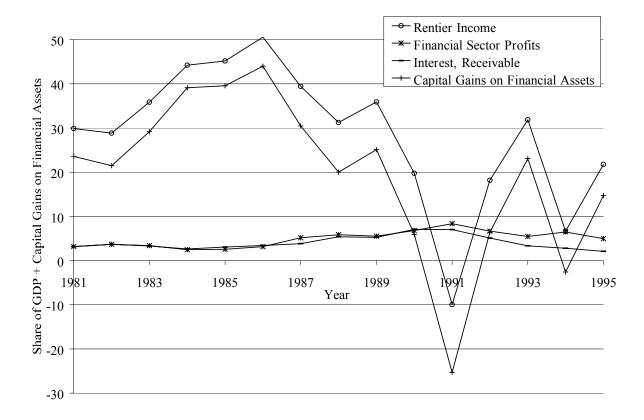


Figure IV.3.12: Components of Rentier Income Including Capital Gains: United Kingdom 1981-1995



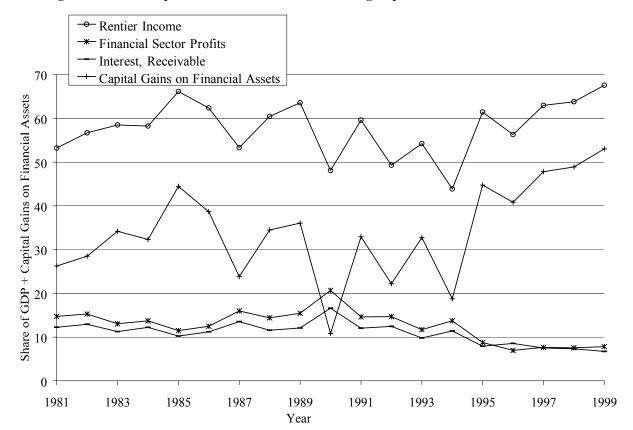


Figure IV.3.13: Components of Rentier Income Including Capital Gains: United States 1981-1999

#### V. SUMMARY AND CONCLUSIONS

This paper has presented the first estimates of rentier share of income, with and without capital gains, for a large set of OECD countries for the period 1960-2000. Generally they show that rentier shares increased dramatically in most countries between the first two decades and the second two decades of the period. These data are thus consistent with the views that owners of financial assets and firms have gained relative to other groups in society during the last several decades in many countries. When capital gains are included, the estimates become much more volatile, but for some countries, such as the United States, the inclusion of capital gains magnifies and lengthens the increase of rentier share, well into the late 1990's.

These data can serve researchers as an empirical foundation for research concerning the causes and effects of variations in rentier shares of income. Some of this research is underway or has been already completed. Interesting questions along these lines include: What are the determinants of the variations in rentier income? For example, to what extent do changes in inflation, interest rates, and macroeconomic policy and financial liberalization affect rentier income? (See for example, the initial work by Epstein and Power, 2003). What is the impact of increases in rentier shares on investment and economic growth (see for example the work by Stockhammer, 2000; Power, 2003). Do changes in rentier incomes reflect changes in the political power of rentier groups? (e.g. Dumenil and Levy, 2001; Epstein, 2001) We hope that these data help researchers answer these and other important questions concerning the relationship between macroeconomics, finance, political economy and income distribution.

# **Appendix**<sup>7</sup>: Methods and Sources

Because several methods were used to compute each of two different data series, each method of data compilation is labeled according to the series to which it pertains and its degree of reliability. This is done for ease of explanation and also to provide a rating system of sorts that can be used easily to convey the relative reliability of an individual datum. Methods used to compile rentier income share data are labeled R and a number 1, 2, or 3. The most reliable data are given a designation 1, and the least reliable data, a designation 3. Methods used to compile corporate non-financial sector profit share data are labeled NF and a number 1 or 2. Again, the most reliable are given the designation 1. Data computed using the same number were computed based on data taken from the same source. For example, the original data for the rentier income share component financial sector profit computed using Method R1 and its analogous non-financial sector data series computed using Method NF1 were taken from the same source, the OECD National Accounts Vol. II, 2001 Edition.<sup>8</sup>

Several methods were used to calculate rentier income share and corporate non-financial sector profit share data for each country because of differing availability of data between countries. Methods R1 and NF1 uses the 2001 revision of the National Accounts Vol. II data published by the OECD. These national accounts data contain the most comprehensive information. In addition, the 2001 edition contains the latest revision of these data, and the data were reported using the newest accounting system. It is for these reasons that data computed using Methods R1 and NF1 should be considered the most reliable. Methods R2 and NF2 use the 1997 revision of the national accounts data published by the OECD. These data are equally comprehensive, but of an earlier revision, which made for considerable differences in many of the series. In addition, the older accounting system was used. No documentation for this accounting system exists, although System of National Accounts 1993 mentions differences between the new and old systems in places throughout the volume. This method is considered the second most reliable method because of the comprehensiveness of coverage by the national accounts. Method R3 uses data on bank profits data, also published by the OECD<sup>10</sup>, in addition to the national accounts data in the computation of rentier income share. This method should be considered the least reliable because of its narrow coverage of financial institutions. The following sub-sections describe Methods R1, R2, R3, NF1, and NF2 in greater detail.

Rentier income share is also calculated with capital gains on financial assets data in addition to financial sector profits and interest receivable. Series that include capital gains are calculated using the same methods described below except that capital gains on financial assets are added to both rentier income share and to GDP. A description of the calculations of capital gains on financial assets is found in subsection V.3. Appendix II gives additional information for individual countries not supplied in this section.

<sup>&</sup>lt;sup>7</sup> For more detailed country information, see Power, Epstein and Abrena, "Individual Country Notes" which can be found at: www.umass.edu/peri/

<sup>&</sup>lt;sup>8</sup> Organization for Economic Co-operation and Development, *National Accounts Volume II: Detailed Tables*, (Paris: OECD, 2001).

<sup>&</sup>lt;sup>9</sup> Commission of the European Communities, International Monetary Fund, Organization for Economic Cooperation and Development, United Nations, World Bank, *System of National Accounts 1993* (New York: United Nations, 1993), passim.

<sup>&</sup>lt;sup>10</sup> Organization for Economic Co-operation and Development, *Bank Profitability: Financial Statements of Banks*, (Paris: OECD, 2001).

#### A. Rentier Income Share Data

#### A.1 Method R1: Highest Quality Rentier Income Share Data

All data was taken from the 2001 edition of the National Accounts Tables Volume II published by the OECD. The 2001 edition of the National Accounts Tables utilizes the accounting system described in the System of National Accounts 1993. 11 Entrepreneurial income is used as a measure of profits for the corporate financial sector. Entrepreneurial income is "a concept that is close to the concept of profit and loss as understood in business accounting." Entrepreneurial income was calculated by summing property income and operating surplus for the financial sector and then subtracting reinvested earnings on foreign direct investment, property income attributed to insurance policy holders, interest payable, and rents payable for the financial sector. In the 2001 edition of the OECD National Accounts, the sum of property income and operating surplus is called the total resources of the Allocation of Primary Income Account (Account II.1.2). In this edition of the National Accounts, property income includes reinvested earnings on foreign direct investment and property income attributed to insurance policy holders. Both of these items were subtracted from property income before performing any calculations. This was done because reinvested earnings on foreign direct investment are already included as part of property income. The "actual distributions [of reinvested earnings on foreign direct investment] may be made out of the entrepreneurial income of direct foreign investment enterprises in the form of withdrawals of income from quasi-corporations."<sup>13</sup> Property income attributed to insurance policy holders was subtracted because the authors wish to include income only from financial activities and not insurance. This subtraction allowed the 2001 edition to achieve consistency with the 1997 edition of the National Accounts, which does not include either of these items in its counterpart series, property and entrepreneurial income. 14 The 1997 edition of the National Accounts is used to complement data from the 2001 edition. Note that entrepreneurial income calculated in this way includes entrepreneurial income received by the central bank, except in countries where the central bank is controlled by the government "as a matter of policy." In this case, entrepreneurial income realized by the central bank would be included with the government accounts, and it would not enter into the entrepreneurial income calculations for the corporate financial sector. Refer to the SNA 1993 handbook for further information on individual countries.

Rentier income share was calculated in two ways. The first is by adding to entrepreneurial income interest income realized by the rest of the economy (excluding government). The second is by adding to entrepreneurial income and interest income realized by the rest of the economy (excluding government) capital gains on financial assets realized by the rest of the economy (excluding government). Rentier income share was calculated in these two ways because capital gains are typically not included in estimates of GDP, which serves as the denominator of our measure of rentier income share. Therefore, if capital gains are to be included with rentier income share, then the denominator must include capital gains as well as GDP. Interest income realized by the rest of the economy is defined as the sum of interest receivable for the corporate non-financial sector, the household sector, and the non-profit institutions serving households (NPI) sector.

Rentier share is defined as rentier income share as a share of GDP measured according to the expenditure approach less government sector GDP. GDP is defined as "the sum of gross values added at basic prices

<sup>&</sup>lt;sup>11</sup> United Nations, 1993, Section 7.18

<sup>&</sup>lt;sup>12</sup> United Nations, 1993, Section 7.18.

<sup>&</sup>lt;sup>13</sup> United Nations, 1993, Section 7.120.

<sup>&</sup>lt;sup>14</sup> The figures are revised for each edition of the accounts. After subtracting these two items, the overlapping figures for Japan were the same, although other countries' series differed significantly.

<sup>&</sup>lt;sup>15</sup> United Nations, 1993, Section 4.86-4.87.

plus all taxes less subsidies on products." It includes all foreign transactions by resident institutional units. In countries where the central bank is separated from the central government, GDP includes gross product originating from the central bank; otherwise any gross product originating from the central bank was included in the government sector and was subtracted out. Thus, for any given country, the activities of the central bank are either completely included or completely excluded from the rentier income share calculations. Given the current availability and the nature of the accounting system, it is not possible to separate out either the entrepreneurial income realized by the central bank or the gross product originating from the central bank. Thus in countries where the central bank is included as part of the corporate non-financial sector, it necessary to consider the importance of the country's central bank when using these rentier data in an analysis.

## A.2. Method R2: Higher Quality Rentier income share Data

All data was taken from the 1997 edition of the National Accounts Tables published by the OECD. The accounting system used in the 1997 edition is different from the system used in the 2001 edition. Documentation for the 1997 edition is not available, but the SNA 1993 handbook does in places outline differences between the two systems, and the line items are usually similar enough to interpret the older accounting system. The older system analogue to property income in the newer system is property and entrepreneurial income. Entrepreneurial income is calculated the same way as in the newer system, namely by adding to property and entrepreneurial income operating surplus and subtracting from it interest payable and rents payable. Property and entrepreneurial income does not include reinvested earnings on foreign direct investment and property income attributed to insurance policyholders. As with the 2001 edition, the 1997 edition includes the central bank as part of the corporate financial sector except in countries were the central bank is separated by law from the central government.

Rentier share is defined as rentier income share as a share of GDP measured according to the expenditure approach less government sector GDP. GDP is defined as "the sum of gross values added at basic prices plus all taxes less subsidies on products." In countries where the central bank is separated from the central government, GDP includes gross product originating from the central bank; otherwise any gross product originating from the central bank was included in the government sector and was subtracted out. Thus, for any given country, the activities of the central bank are either completely included or completely excluded from the rentier income share calculations. Given the current availability and the nature of the accounting system, it is not possible to separate out either the entrepreneurial income realized by the central bank or the gross product originating from the central bank.

## A.3. Method R3: High Quality Rentier income share Data

Data on profits were obtained from the 2000 edition of the OECD publication *Bank Profitability:* Financial Statements of Banks.<sup>19</sup> Banks are defined differently for different countries, but in general, banks are defined as "institutions which primarily take deposits from the public at large and provide finance for a wide range of purposes."<sup>20</sup> The methodological handbook that accompanies this series, Bank Profitability: Methodological Country Notes,<sup>21</sup> gives detailed information for each country on the precise definition of a bank and its activities. Note that in nearly all OECD countries, banks are engaged in a multitude of financial activities. Thus the use of bank profits as a measure of the profits of financial intermediaries is not at all limiting for the estimation of a country's rentier income share. These series

<sup>20</sup> OECD, 2001. 3.

<sup>&</sup>lt;sup>16</sup> United Nations, 1993, Section 6.237.

<sup>&</sup>lt;sup>17</sup> United Nations, 1993, Section 6.239.

<sup>&</sup>lt;sup>18</sup> United Nations, Section 6.237.

<sup>&</sup>lt;sup>19</sup> OECD, 2001..

<sup>&</sup>lt;sup>21</sup> Organization for Economic Co-operation and Development, *Bank Profitability: Methodological Country Notes*, (Paris: OECD, 2000).

include profits of domestically owned subsidiaries operating in other countries, but do not include the profits of foreign-owned subsidiaries operating domestically.

Rentier income share is calculated by adding to profits after taxes interest income realized by the rest of the economy and, in the second measure only, capital gains on financial assets realized by the rest of the economy. For consistency, the measure of interest income realized by the rest of the economy is defined as in the methods described above. These data were taken from the OECD National Accounts tables. The 2001 edition was used primarily, and the 1997 edition was used for data not available in the 2001 edition.

#### B. Corporate Non-Financial Sector Data

# **B.1. Method NF1: Highest Quality Corporate Non-Financial Sector Data**

These data were compiled using the 2001 edition of the OECD National Accounts. As for the corporate financial sector profit component of rentier income share, entrepreneurial income used as a measure of profits for the corporate non-financial sector. Entrepreneurial income in the non-financial sector were computed in the same way as in the financial sector. Property income, receivable was added to operating surplus for the non-financial sector, and from that reinvested earnings on foreign direct investment, receivable; property income attributed to insurance policy holders, receivable; interest payable; and rents payable were subtracted out. For more information on entrepreneurial income, see the explanation of Method R1.

#### **B.2. Method NF2: Higher Quality Corporate Non-Financial Sector Data**

Data on corporate non-financial sector profits were compiled using the 1997 edition of the OECD National Accounts. As for the corporate financial sector profit component of rentier income share, entrepreneurial income used as a measure of profits for the corporate non-financial sector. Entrepreneurial income in the non-financial sector were computed in the same way as in the financial sector. The older system analogue to property income in the newer system is property and entrepreneurial income. Entrepreneurial income is calculated the same way as in the newer system, namely by adding to property and entrepreneurial income operating surplus and subtracting from it interest payable and rents payable. Property and entrepreneurial income does not include reinvested earnings on foreign direct investment and property income attributed to insurance policyholders. For more information on property and entrepreneurial income, see the explanation of Method R2.

# C. Capital Gains on Financial Assets

Capital gains on financial assets are a component of rentier income share as it has been defined in this paper. Data presented in section *III: Rentier income share Not Including Capital Gains on Financial Assets* and in section *IV: Rentier income share Including Capital Gains on Financial Assets* are identical except for the addition of capital gains on financial assets to the numerator and the denominator.

A time series of capital gains on financial assets is not available for any country in our sample. Thus, we construct a simple equation in which we theorize that new investment in financial assets (or new issues of financial assets) is a fraction of total saving in an economy. This fraction is the ratio of stock of financial assets in an economy to the total wealth of the economy. Total wealth is equal the stock of financial assets plus physical capital stock in an economy. Thus, capital gains on financial assets were calculated according to Equation IV.1 reproduced here.

$$CG = FA_t - FA_{t-1} - S_t * \frac{FA_t}{FA_t + K_t}$$

where CG = capital gains on financial assets

FA = stock of financial assets

S = gross savings

K = gross capital stock

Stock of financial assets data were obtained from the OECD Institutional Investors Yearbook 2001 edition. Stock of financial assets includes stocks and bonds owned by non-government resident institutional units. Gross savings data were obtained from the OECD National Accounts II 2001 Edition. These data were calculated by first adding net saving and consumption of fixed capital for both the total economy and the government sector to obtain gross saving for the whole economy and government sector. Then gross saving of the government sector was subtracted from gross saving of the whole economy, to arrive at gross saving of non-government resident institutional units. Gross capital stock data were obtained from the Vikram Nehru and Ashok Dhareshwar dataset available online at the World Bank at http://www.worldbank.org/research/growth/ddnehdha.htm. This dataset includes gross capital stock of an economy, and spans the period 1950-1990 for the countries of interest in this paper. After 1990, the capital stock series were continued by adding gross investment in year *t* to the gross capital stock datum in year *t-1*. Gross investment data were obtained from the OECD National Accounts II 2001 Edition. Gross investment is the total gross investment of an economy less the gross investment of the government sector.

For information pertaining to an individual country, refer to the companion article "Technical Appendix and Country Notes To: Trends in the Rentier Income Share in OECD Countries, 1960-2000." www.umass.edu/peri.

# **Bibliography**

- Boyer, Robert, 2000. "Is a Finance-Led Growth Regime a Viable Alternative to Fordism? A Preliminar Analysis," *Economy & Society*, Vol. 29, No. 1, Feb. pp. 111-45.
- Commission of the European Communities, International Monetary Fund, Organization for Economic Co-operation and Development, United Nations, World Bank, *System of National Accounts 1993* (New York: United Nations, 1993).
- Crotty, James. 1984. Marxian Theories of Finance and Investment. in Stephen Resnick and Richard Wolff. *Rethinking Marxism*. New Haven: Macromedia.
- Crotty, James. 2002. The Effects of Financialization and Increased Competition on the Performance of Nonfinancial Corporations in the Neoliberal Era, mimeo, Political Economy Research Institute (PERI), University of Massachusetts, Amherst.
- Crotty, James and Gerald Epstein, 1996. "In Defense of Capital Controls". <u>Socialist Register</u>. pp. 118-149.
- Dictionary of Business: Oxford University Press s.v. "rentier". <a href="www.xrefer.com">www.xrefer.com</a>> (15 Jan 2003).
- Diwan, Ishac. 2001. "Debt as Sweat: Labor, Financial Crises and the Globalization of Capital." mimeo, World Bank.
- Duménil, Gérard & Dominique Lévy, "The Costs and Benefits of Neoliberalism. A Class Analysis," *Review of International Political Economy*, Vol. 8, No. 4, Winter 2001, pp. 578-607. Web: www.cepremap.ens.fr/levy
- Economy and Society. 2000. Special Issue on Financialization. Vol 29. No. 1. February.
- Epstein, Gerald. 2001. "Financialization, Rentier Interests and Central Bank Policy", http://www.umass.edu/peri/finagenda.html#alphalist.
- Epstein, Gerald and Dorothy Power. 2003. Rentier Incomes and Financial Crises: An Empirical Examination of Trends and Cycles in Some OECD Countries. www.umass.edu/peri/
- Froud, Julie et al., "Accumulation Under Conditions of Inequality," *Review of International Political Economy*, Vol. 8, No. 1, Spring 2001, pp. 66-95. Web: <a href="http://les.man.ac.uk/IPA/papers/114.pdf">http://les.man.ac.uk/IPA/papers/114.pdf</a>
- Harrison, Ann E. 2002. "Has Globalization Eroded Labor's Share? Some Cross-Country Evidence", mimeo, University of California, Berkeley.
- Kalecki, Michal. 1990. Political Aspects of Full Employment. in J. Osiantynski, ed., *Collected Works of Michal Kalecki*. Vol. 1. Oxford: Oxford University Press.

Keynes, John Maynard. 1965. General Theory of Employment, Interest, and Money, New York: Harcourt.

Krippner, Greta R., 2002. "What is Financialization?" www.umass.edu/peri/

Lenin quoted in Geoffrey Pilling, "Keynesianism, State Spending, and the Arms Economy," <a href="http://www.marxists.org/archive/pilling/works/keynes/ch04.htm">http://www.marxists.org/archive/pilling/works/keynes/ch04.htm</a> (15 Jan 2003).

Levine, Ross and Sara Zervos. 1998. "Stock Markets, Banks and Growth". *American Economic Review*, vol 88 (3), pp. 537-558.

OECD, Bank Profitability: Financial Statements of Banks, (Paris: OECD, 2001).

OECD, Bank Profitability: Methodological Country Notes, (Paris: OECD, 2000).

OECD, Institutional Investors Yearbook, (Paris: OECD, 2001).

OECD, National Accounts Volume II: Detailed Tables, (Paris: OECD, 1997).

OECD, National Accounts Volume II: Detailed Tables, (Paris: OECD, 2001).

Nehru, Vikram and Ashok Dhareshwar. "A New Database on Physical Capital Stock: Sources, Methodology, and Results," *The World Bank Group* 1993. <a href="http://www.worldbank.org/research/growth/rae93nd.htm">http://www.worldbank.org/research/growth/rae93nd.htm</a> (3 Feb 2003).

The Penguin Dictionary of Economics, s.v. "rentier". < www.xrefer.com > (15 Jan 2003).

- Pollin, Robert, 1997. 'Socialization of Investment' and 'Euthanasia of the Rentier': The Relevance of Keynesian Policy Ideas for the Contemporary U.S. Economy," in Philip Arestis & Malcolm Sawyer, eds., *The Relevance of Keynesian Economic Policies Today* (New York: St. Martin's Press, 1997), pp. 57-77.
- Power, Dorothy. 2003, forthcoming. "The Impact of Rentier Incomes on Investment and Growth in OECD Countries". PERI Working Paper.
- Power, Dorothy, Gerald Epstein and Mathew Abrena. 2003. "Technical Appendix and Country Notes To: Trends in the Rentier Income Share in OECD Countries, 1960-2000." www.umass.edu/peri
- Stockhammer, Engelbert. 2000. "Financialization and the Slowdown of Accumulation," Vienna University Working Paper, No. 14.
- WebFinance, Inc. Financial Glossary. InvestorWords. <a href="http://www.investorwords.com/">http://www.investorwords.com/</a>> (15 Jan 2003).
- Yeldan, A. Erinc, 2000. "The Impact of Financial Liberalization and The Rise of Financial Rents on Income Inequality; The Case of Turkey", WIDER.
- Zhu, Andong, Michael Ash and Robert Pollin. 2002. "Stock Market Liquidity and Economic Growth: A Critical Appraisal of the Levine/Zervos Model", PERI Working Paper, No. 47. www.umass.edu/peri/