Globalization, Offshoring and Economic Insecurity

in Industrialized Countries

William Milberg and Deborah Schöller*

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*New School for Social Research, USA, and University of Hohenheim, Germany, respectively. Both authors are affiliated with the New School's Schwartz Center for Economic Policy Analysis. The authors would like to thank Richard Kozul-Wright, Teresa Ghilarducci, Marva Corley, Mariangela Parra and the research staff at UNDESA for comments on a preliminary draft.

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1. Introduction

How can one dare speak of economic insecurity in the industrialized countries when the rate of per capita GDP in Germany is 120 times that in Uganda, the rate of unemployment in the U.S. is 1/10th that in Nepal, or when the share of population below the poverty line in France is 1/10th of that in Zimbabwe? The question itself indicates that economic insecurity is a relative phenomenon. Those who are subject to a high risk of a sudden drop in income or wealth without adequate offsetting support are facing economic insecurity, irrespective of nationality or location. Hacker (2006, p. 20) defines economic insecurity as "a psychological response to the possibility of hardship-causing economic loss." He notes, however, that "a feeling of insecurity is not enough to say someone is insecure. Insecurity requires real risk that threatens real hardship."

By many accepted measures – real wage growth, inequality, labor's share of national income, the incidence of long-term unemployment, the number of workers displaced by foreign trade and investment – "real" economic insecurity in industrialized countries increased in the past 15-20 years. The period has also been one of rapid globalization, with international trade and capital flows reaching historic highs. The role of globalization in heightened economic insecurity has thus become a major topic of debate in the advanced countries. Throughout the paper we focus on six countries: Denmark, France, Germany, Japan, the United Kingdom and the United States. These countries represent a broad spectrum of the advanced industrialized world, and although all have expanded their exposure to international trade and investment they have not all

experienced the same degree of increased economic insecurity. We also find that the *perception* of economic insecurity is strong in these industrialized countries, especially in the US and in France.

The risk from a high level of real – and perceived – economic insecurity in the industrialized countries is borne by both the government and by private households. Households consumption and borrowing patterns may reflect the burden of risk on the private sector. This may partly depend on the private sector's expectation of government policy. While rising economic insecurity has in some cases resulted in increased demand for state-provided social protections, these demands have met various degrees of resistence from business and government on the grounds that they raise production costs and reduce a nation's international competitiveness.[1] The new economic insecurity has occurred in a variety of political contexts. Although offshoring has risen in all industrialized countries and increased the degree of economic insecurity on average across the OECD, economic security varies considerably across countries, largely depending on the institutions in place. The ILO index of economic security gives the following rankings for the six countries that are the focus of this paper[2]:

Table 1: ILO Economic Security Index

Rank	Country	Economic Security Index
4	Denmark	0.91
7	France	0.83
9	Germany	0.79
15	United Kingdom	0.74
18	Japan	0.72
25	United States	0.61

Source: ILO (2004), Economic Security for A Better World.

[1] See Rodrik (1997) on the increased demand for social protection.

[2] The index combines measures of job security and social security, where the former includes income security and "voice representation security" and the latter measures "access to basic needs infrastructure pertaining to health, education, dwelling, information and social protection." See ILO (2004).

As we will see below, Germany has a greater intensity of offshoring than the U.S., and France has a higher rate of unemployment than Japan. But since economic security is affected by the policies and institutions that influence market outcomes, Germany has a higher economic security rank than the U.S., and France ranks higher than Japan.

During the 1990s a good deal of research aimed to show that technological change rather than trade had been the principle source of labor market churning in industrialized countries. This paper revisit this debate in light of the evolution of the world trading environment. This evolution has involved the emergence of new and larger trading nations in the developing world, the development of sophisticated global supply chains driven by lead firms in industry, the financialization of the non-financial corporate sector in the major countries, and the implementation of a number of regional free trade agreements that lower trade barriers and extend property rights protection to foreign investors.

This paper addresses three central questions. First, what has been the impact of globalization, and specifically offshoring through trade and foreign investment, on economic insecurity in the industrialized countries? Second, what are the specific microeconomic and macroeconomic channels through which globalization impacts economic insecurity in these countries. Third, what political responses have best addressed rising economic insecurity without inflicting damage on other countries and in particular on the low-income, developing countries whose export performance has been bolstered by the new wave of globalized production?

The main findings of this paper are:

- Since the mid-1970s most industrialized countries have experienced a rise in economic insecurity, and the burden of this economic risk has in many countries shifted from the state and corporations to private households.

- There are different models of state-market relations with respect to economic insecurity, ranging from the limited state role in the Anglo-Saxon model to a heavy state role in the Rhineland model and a hybrid model of "flexicurity" in Denmark and a few others.
- International trade and investment increasingly occur within global supply chains, which have reached a level of growth and depth to constitute a "new wave" of globalization in which the creation of value and geographical location are significantly delinked and in which trade and technology are inextricably linked to an extent not previously acknowledged: Offshoring would be unthinkable without low-cost information technology, and information technology would not be as low cost if not for the effective extension of global supply chains into low-wage countries.
- The new wave of globalization has created new sources of gains from trade and new channels for the transmission of trade and investment to economic insecurity. Moreover, as supply chains extend to high-tech goods and higher-skill services, there are massive possibilities for the future expansion of offshoring, indicating that economic vulnerability will rise across all skill and education groups rather than falling entirely on low-skill workers, as had been the case until recently.
- Spreading and sustaining the benefits of offshoring depends on the domestic reinvestment of efficiency gains that offshoring brings. And while offshoring has contributed to the rise in profit share of national income seen in most industrialized countries, these countries are also seeing investment rates fall, both as a percentage of profits and as a percentage of GDP. Non-financial corporations are increasingly using profits to raise dividend payments, share buybacks and the purchase of other financial assets, rather than making productive investment.

- Denmark's mix of labor market flexibility, ample social protection and active labor market policies – so-called "flexicurity" – has successfully raised economic security in that country despite globalization pressures. U.S. labor market flexibility combined with relatively meager social protections in the context of rapid growth of imports from developing countries has contributed to an unprecedented rise in income inequality and economic insecurity for a large share of the American population.
- Given the macroeconomic consequences of offshoring, flexicurity arrangements alone are likely to be insufficient to sustain high levels of economic security in the industrialized world. Trade protection has largely been avoided, but other policies involving redistribution and the channeling of the gains from offshoring to economic growth are likely to gain traction in the near future, as the offshoring phenomenon rapidly expands beyond low-skill manufacturing workers.
- Finally, the provision of a solid and portable set of social protection does not reduce a nation's trade competitiveness and in fact may raise it as increased worker security leads to greater possibilities for innovation and rapid productivity growth.

We begin with an overview of recent trends in economic insecurity and the different policy regimes in industrialized countries. Then we consider in detail how globalization and offshoring may have contributed to rising economic insecurity. We conclude with a discussion of the importance of combining creative macroeconomic and microeconomic policies in order to provide more security even as economic openness continues to grow.

2. Economic Insecurity in Industrialized Countries

The period 1950-1973 is widely referred to as the "Golden Age" of capitalism, but it might be better termed the period of rising economic *security* for people in the industrialized

countries. Not only did the OECD countries experience rapid growth in real GDP, but this was reflected in rising median wages, even more rapid improvements in median family income, relatively low rates of unemployment, falling inequality, and improvements in the post-Great-Depression system of social protection in most countries.

Since 1973 the industrialized economies have grown more slowly, as productivity growth has diminished. As seen in Table 2, all six countries in our sample had higher rates of average annual GDP growth for the period 1950-1973 than they did over the period 1980-2007. In some cases (Japan, Germany and France) the growth rate fell by more than half. Labor productivity growth follows a similar pattern. Over the entire OECD, total factor productivity growth fell to 1.5% per annum on average after 1985, from rates more than twice that during the twenty years before 1973.[3]

Table 2: Economic Performance, Golden Age versus Post-Golden Age
(compound annual growth rates unless otherwise indicated)

	Denmark	France	Germany	Japan	UK	US
Gross Domestic Product						
1950-1973	3.8%	5.0%	6.0%	9.3%	2.9%	3.9%
1980-2007	2.1%	2.0%	2.2%	2.3%	2.5%	3.0%
Labor Productivity						
1950-1973	2.9%	4.7%	4.7%	7.5%	2.4%	2.3%
1980-2007	1.7%	1.5%	0.8%	1.8%	2.1%	1.6%
Employment-to-Population-Ratio Average						
1960-1973	48.5%	41.0%	45.1%	48.1%	45.4%	38.9%
1980-2007	50.9%	40.2%	45.9%	49.9%	44.8%	47.4%
Unemployment Rate Average						
1956-1973	1.1%*	1.9%	1.3%	1.5%	1.8%	5.0%
1980-2006	7.2%	10.1%	7.6%	3.3%	7.9%	6.2%

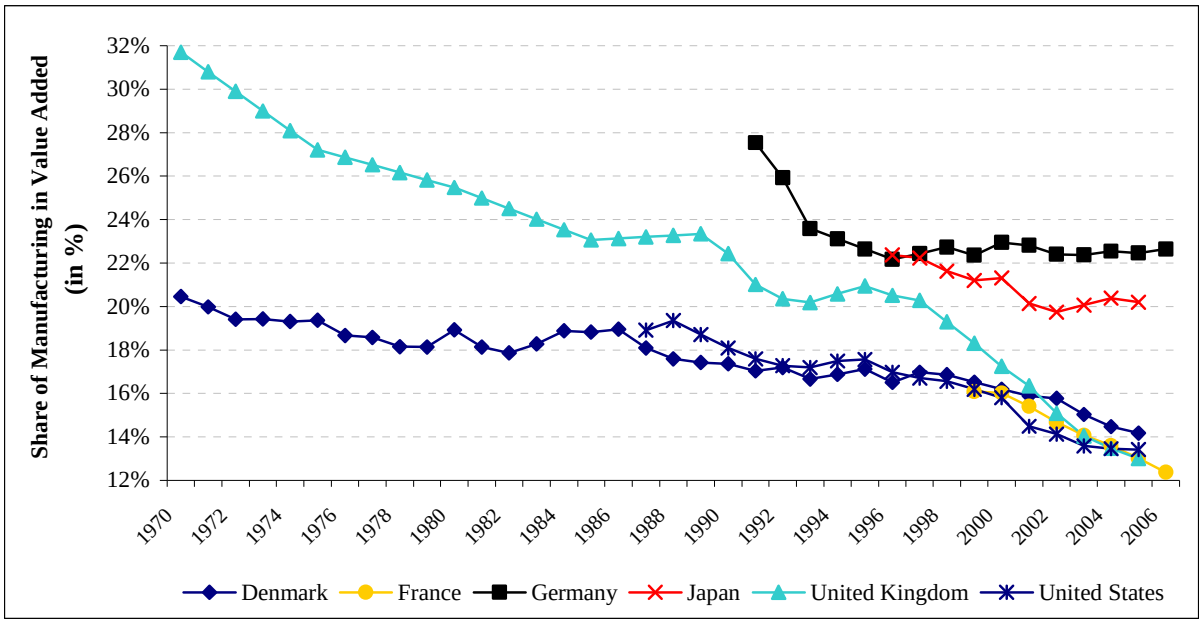
Source: Own illustration. Data: The Conference Board and Groningen Growth and Development Centre, Total Economy Database, January 2008. OECD Labor Force Statistics. *Average based on 1960, 1965, 1967, 1969-1973

[3] Howell (2005), Table 3.2.

The productivity growth slowdown occurred as the process of deindustrialization continued in all countries in our sample except Germany, and in many cases the rate of deindustrialization accelerated (see Figure 1).[4] Manufacturing now accounts for between 12% and 15% of total value added in the U.S., U.K., Denmark and France. The two trends are not unrelated, as services productivity, while difficult to measure, is widely recognized to be lower than productivity in manufacturing. Thus the increase in the importance of services in economic activity relative to manufacturing contributed to reductions in economy-wide rates of productivity growth. By some accounts manufacturing output growth is a main driver of productivity growth, following so-called Verdoorn's Law. Moreover, the manufacturing sector traditionally offered jobs with high pay and employment protection, often the result of effective union wage bargaining. Service sector jobs are varied in their skill requirements and pay, but generally offer lower pay and less job security and employee benefits, partly due to low rates of unionization in services industries, an issue we return to below. As services have grown as a share of employment and value added, productivity growth has been relatively low, certainly as compared to the "Golden Age".

[4] According to Kalmbach et al. (2005), the German data overstate the size of the manufacturing sector because many services are counted in manufacturing.

Figure 1: Share of Manufacturing in Value Added, 1970-2006 (in %)



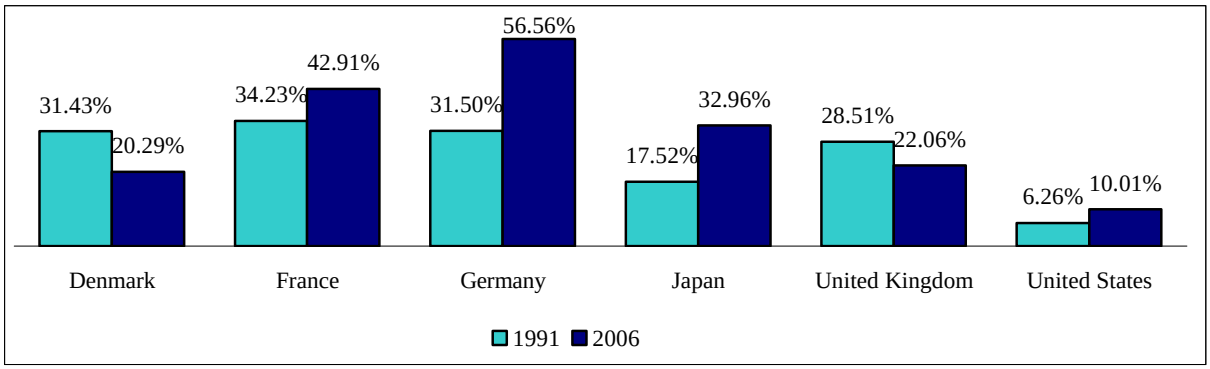
Source: Own illustration. Data: OECD National Accounts Statistics.

A. Unemployment and Inequality

More importantly for the purposes of this paper, the post-1973 period has seen a significant increase in worker vulnerability in many industrialized countries. The average rate of unemployment (on a standardized basis) has been significantly higher in the post-Golden Age era compared to the 1956-1973 period, ranging from slightly higher in the U.S. to more than five times higher in France, Germany and Denmark (see Table 2). The incidence of long-term unemployment (that is, unemployment duration greater than one year) also rose over the post-Golden Age in many industrialized countries (Figure 2). In our six country sample, France, Germany, Japan and the U.S. all saw long-term unemployment higher in 2006 compared to 1991. Denmark and the UK saw a decline in long-term unemployment.[5]

[5] We have used 1991 as a start point in much of the analysis so that German data reflect unification.

Figure 2: Share of Long-Term Unemployed (> 1 Year) in Total Unemployed (in %)



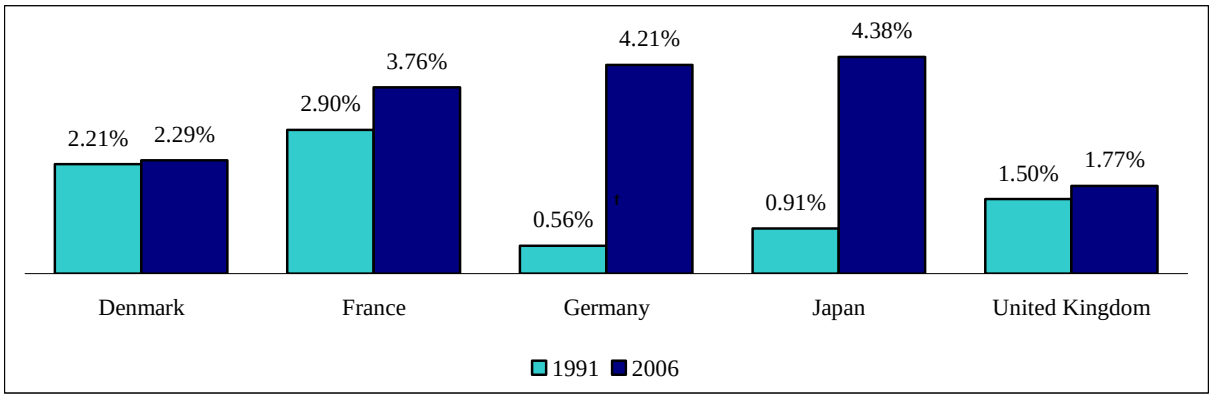
Source: OECD Labor Force Statistics.

Another measure of economic insecurity is the share of temporary or involuntary part-time employment. By this measure, Germany and Japan, the two countries with the greatest manufacturing share of value added, showed the largest increase in involuntary part-time employment between 1991 and 2006. France and the U.K. saw a small increase and in Denmark the share remained effectively constant (see Figure 3)[6].

The slowdown in GDP and productivity growth described above not only brought higher rates of unemployment, but occurred along with a slowdown in the growth of wages. In the U.S., real median wages have been effectively stagnant since the late 1970s.[7] The result of these trends is that beginning in the 1980s, the labor share of national income began to fall across many industrialized countries. Since most labor force participants are not owners of capital, this trend in the labor share captures in a broad way the growing economic insecurity in the industrialized world.[8]

6 Comparable data on this variable for the US were unavailable.
7 Temin and Levy (2006).
8 Since the U.S. labor share data include CEO stock options and other similar types of compensation, the figures overstate the labor share in the more recent years when this type of income expanded rapidly, especially when compared with CEO compensation in other countries.

Figure 3: Share of Involuntary Part-Time Workers in Total Employment (in %)



Source: Own illustration. Data: OECD Labor Force Statistics. NB: 1992 data for France.

Even more dramatic than the rise in income inequality between wage earners and profit earners was the growing rise in inequality across wage earnings, and especially in the gap between the wages of skilled and unskilled workers. The rise in "wage inequality" has been much discussed and is documented below for our six-country sample in Table 3, which shows the ratio of wages in the top decile to the bottom decile for 1985, 1991 and 2005. Over the entire period, U.S. income inequality has been far above the others, and compression of incomes much greater in Denmark than in all the rest. Since 1985, France and Japan were the only countries not to experience an increase in inequality. In the other four countries inequality began to rise only after 1991. Between 1991 and 2005 heightened inequality has been most pronounced in the U.S. and Germany, with smaller increases in earnings dispersion in Denmark, and the U.K. Inequality in Japan remained constant over the entire period.

Table 3: Wage Inequality, 1985-2005

(Ratio of wages of top 10 percent of earners to bottom 10 percent of earners)

	1985	1991	2005
Denmark	2.2	2.2	2.6
France	3.1	3.3	2.9
Germany	2.9	2.8	3.3
Japan	3.1	3.1	3.1
United Kingdom	3.2	3.4	3.6
United States	4.1	4.3	4.9

Source: Wage per full-time employee are calculated based on OECD Labor Force Statistics.
* Wages only for West Germany. 1990 wages for Denmark, 2004 wages for France.

B. The Burden of Risk

There are private and public responses to rising economic insecurity for workers. Households may borrow in order to insulate their spending patterns from earnings volatility and the rise in home equity loans in the U.S. and consumer credit in the U.K. are partly for this reason.[9] Household saving rates out of disposable income fell over the 1990s for most of the countries in our sample (Germany and France being the exceptions), indicating the need for households to limit saving in order to maintain economic security and to incur debt for the same purpose (OECD, 2007a).

Government responses to economic insecurity also vary greatly. While the U.S. is different from our other five countries in terms of its privatization of the burden of health insurance and pensions (see below), in fact all countries except France experienced a decline since 1981 in their unemployment benefit replacement rate, and this rate declined in France after 2001 (Table 4). Moreover, only Denmark and France among our sample of countries increased spending on active labor market programs as a percentage of GDP since 1990, with France again showing a decline after 2000 (Table 4). There has been a different pattern of change in terms of

[9] Taylor et al. (2005) find that the deterioration in the U.S. current account between 1995 and 2003 closely tracks the rise in health care spending by Americans. This indicates that Americans were not so obviously on a whimsical buying spree, as is so often claimed, but instead were trying to retain spending in the face of stagnant real wages and rapidly rising costs of health care.

regulation of hiring and firing, with Denmark and Germany and Japan becoming less strict, and France and to some extent the U.K. becoming more strict (Table 5).

Table 4: Labor Market Policy Indicators

Public Expenditures for Active Labor Market Programmes (% of GDP)	**1980**	**1990**	**2000**	**2003**
Denmark	0.4%	1.1%	1.6%	1.6%
France	n.a.	0.8%	1.3%	1.1%
Germany	n.a.	1.0%	1.1%	1.1%
Japan	n.a.	0.3%	0.2%	0.3%
United Kingdom	0.6%	0.6%	0.4%	0.5%
United States	0.2%	0.2%	0.1%	0.1%
Gross Unemployment Replacement Rate (%)	**1981**	**1991**	**2001**	**2005**
Denmark	54.2%	51.9%	50.9%	48.9%
France	31.3%	37.6%	43.5%	39.0%
Germany	29.3%	28.8%	29.4%	24.2%
Japan	8.8%	9.9%	9.1%	7.7%
United Kingdom	24.2%	17.8%	16.6%	15.6%
United States	14.6%	11.1%	13.5%	13.5%

Source: Own illustration. Data: OECD Social Expenditures and OECD Tax-Benefit Models.
Gross Unemployment Replacement Rate: The OECD summary measure is defined as the average of the gross unemployment benefit replacement rates for two earnings levels, three family situations and three durations of unemployment. For further details, see OECD (1994), The OECD Jobs Study (chapter 8) and Martin J. (1996), "Measures of Replacement Rates for the Purpose of International Comparisons: A Note", OECD Economic Studies, No. 26. Pre-2003 data have been revised.

Table 5: Strictness of Employment Protection Legislation

(Higher values indicate stricter regulation on hiring and firing)

	1990	**1998**	**2003**
Denmark	2.3	1.4	1.4
France	2.7	3.0	3.1
Germany	3.2	2.5	2.2
Japan	2.1	2.0	1.8
United Kingdom	0.6	0.6	0.8
United States	0.2	0.2	0.2

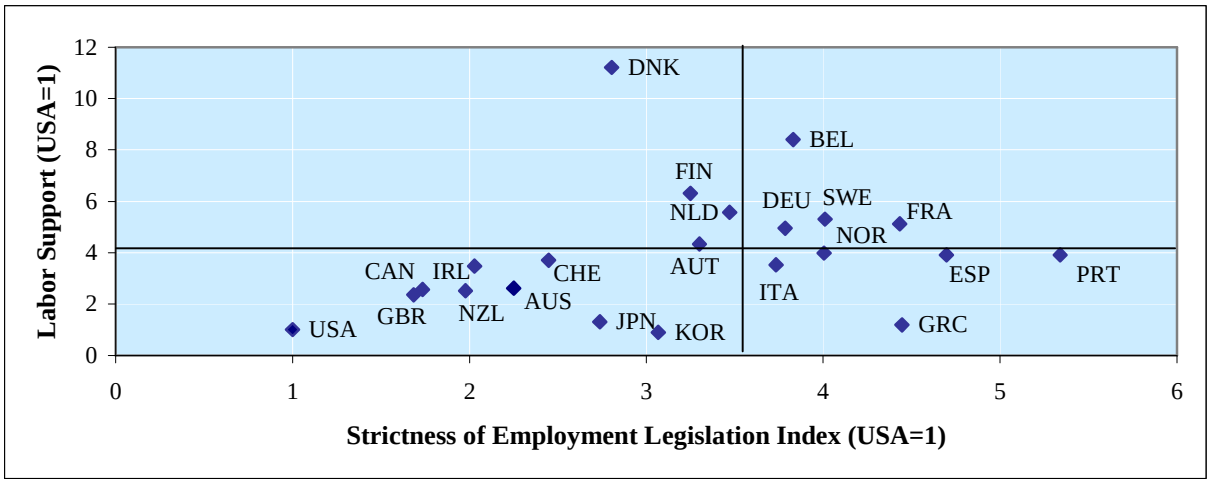
Source: OECD Labor Statistics.
Info on EPL: The OECD uses the term Employment protection legislation (EPL) in the context of employment protection legislation generally. It refers to all types of employment protection measures, whether grounded primarily in legislation, court rulings, collectively bargained conditions of employment or customary practice (http://stats.oecd.org/glossary/detail.asp?ID=3535).

But perhaps more important than the shifting burden of risk are the differences across countries in terms of the degree of labor market flexibility, the level of unemployment benefits,

spending on active labor market programs and the level of pension benefits. Economic insecurity is higher where the state provision of protection is lower or, alternatively, where social protection is more closely tied to employment. By looking at these three variables – strictness of employment protection legislation, gross unemployment replacement rate and public expenditures on active labor market programs – all at once and across the OECD, we see some clear patterns in the government response to economic insecurity. We calculated an index of the strictness of employment legislation by setting the U.S. level of employment protection level and recalculating the relative levels for other countries. We constructed an index of "labor support" by again setting U.S. levels of gross unemployment replacement rates and public expenditures on active labor market programs equal to one and (with equal weights on each variable) combining them into single index. A scatter plot of these two indexes in given in Figure 4.

Five distinct "models" emerge and they follow closely the groupings presented in Boeri (2002). On the lower left we can identify an "Anglo-Saxon model" of low levels of regulation on hiring and firing and low levels of worker support. Here we find the U.S, the U.K., Canada, Australia, Ireland and New Zealand. Countries on the lower right follow the "Mediterranean model" that combines relatively strict employment legislation and low levels of worker support. This group includes Greece, Portugal, Spain, Italy (and Norway). Countries on the upper right of the scatter plot – "the Rhineland model" – combine relatively strict employment protection legislation and high levels of worker support. Here we find France, Sweden, Belgium and Germany. In the upper left are countries with relatively flexible labor markets and high levels of worker support. We call this the "flexicurity model," and its followers include Denmark, Finland and the Netherlands.

Figure 4: Strictness of Employment Legislation vs. Labor Support in OECD countries, 2003 (Indexes, USA=1)



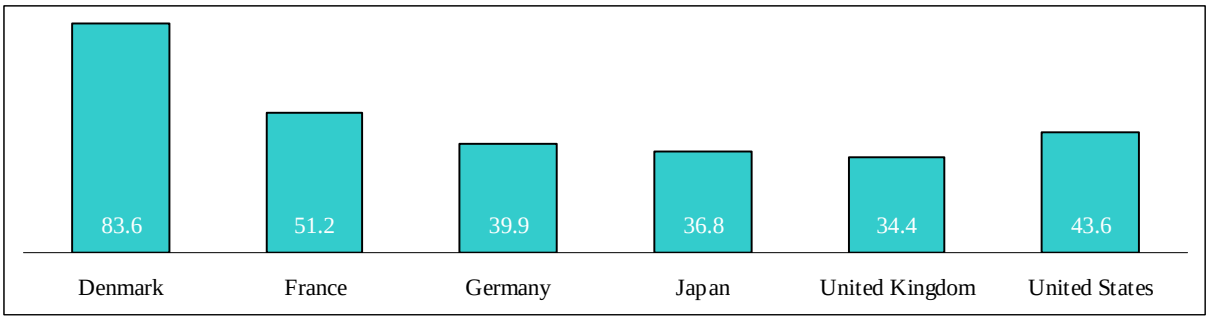
Source: Own calculations, Data: OECD Employment Outlook 2004, OECD Social Expenditures and OECD Tax-Benefit Models.
NB: The Strictness of Employment Legislation Index has been calculated indexing the USA=1, i.e. dividing the values of all other countries by the US value. Higher values indicate stricter regulation on hiring and firing. Labor support is an index (using equal weights) composed of the indexed (USA=1) Active Labor Market Expenditures (as % of GDP) as well as the indexed (USA=1) Gross Unemployment Replacement Rate. Higher values indicate a higher security level. Gross Unemployment Replacement Rate: The OECD summary measure is defined as the average of the gross unemployment benefit replacement rates for two earnings levels, three family situations and three durations of unemployment.

Japan has always been difficult to categorize in these schemes because although the state supports only low levels of labor market and social protection, the private sector had traditionally supported long-term employment security. We would propose an "East Asian model" including Japan and Korea, who both have greater employment protection than those in the Anglo-Saxon group in Figure 4. It would seem that the traditional role for the private sector in Japan has given way to a great extent, as seen by the increase to European levels of Japanese long-term unemployment and involuntary part-time employment.

The flexicurity model has attracted a lot of attention because of a superior Danish performance in trade and employment and the unusual combination of policies, with flexibility in terms of hiring and firing and strong social protection for those seeking employment, including a high level of unemployment benefits and considerable levels of spending on active labor market

programs.[10] Moreover, Denmark greatly exceeds the other countries in terms of pension benefits relative to lifetime earnings (Figure 5). This system of flexicurity is in part the reason for Denmark's attainment of a high level of economic security.

Figure 5: Gross Pension Replacement Rates by Earnings Based on 2004 Rules (in % of median earnings)



Source: Own illustration, Data: OECD pension models. Taken from: OECD Pensions at a Glance, pp. 33-34. NB: For median income earner. The figures are from the OECD (2006) and are "estimates of the level of pension people will receive if they work for a full career and if today's pension rules stay unchanged."

Economic security is by many measures lowest in the U.S. and this is supported by the unusually high perception of insecurity and fear of globalization in the U.S. discussed in the next section. The U.S., often lauded for the degree of flexibility in its labor markets, also stands out in terms of its low levels unemployment benefits and limited state spending on active labor market programs (Table 4). Moreover, over the past twenty years, the U.S. has experienced a dramatic shift in the burden of risk, from government to the households themselves. This has resulted from a combination of more volatile household income and an increase in health insurance costs, a greater reliance on private (as opposed to public) pensions and a continuation of policies of low levels of unemployment benefits. Hacker (2006) describes these political changes as "the great risk shift" as governments and employers shifted the burden of insuring against a rapid decline in income to the employees and households themselves. In their long-term historical analysis of

[10] See, for example, Clasen (2007).

U.S. income distribution, Temin and Levy (2006, p. 5) argue that this deterioration of the social safety net, combined with the decline of other institutions such as trade unions, has been a source of the bifurcation in the growth of productivity and the growth of wages:

"[…] the recent impacts of technology and trade have been amplified by the collapse of these institutions, a collapse which arose because economic forces led to a shift in the political environment over the 1970s and 1980s. If our interpretation is correct, no rebalancing of the labor force can restore a more equal distribution of productivity gains without government intervention and changes in private sector behaviour."

As an indication of the changes in the U.S., Table 5 shows union density in our sample countries since 1980, with the U.S. experiencing by far the greatest decline. The U.K., following a similar model is second in the extent of decline of unionization, but remained still in 2001 at a much higher level than the U.S. France's low rate of unionization would seem to be deceptive, since bargaining coverage of union agreements has remained very broad.

Table 5: Union Members as share of Total Labor Force (in %)

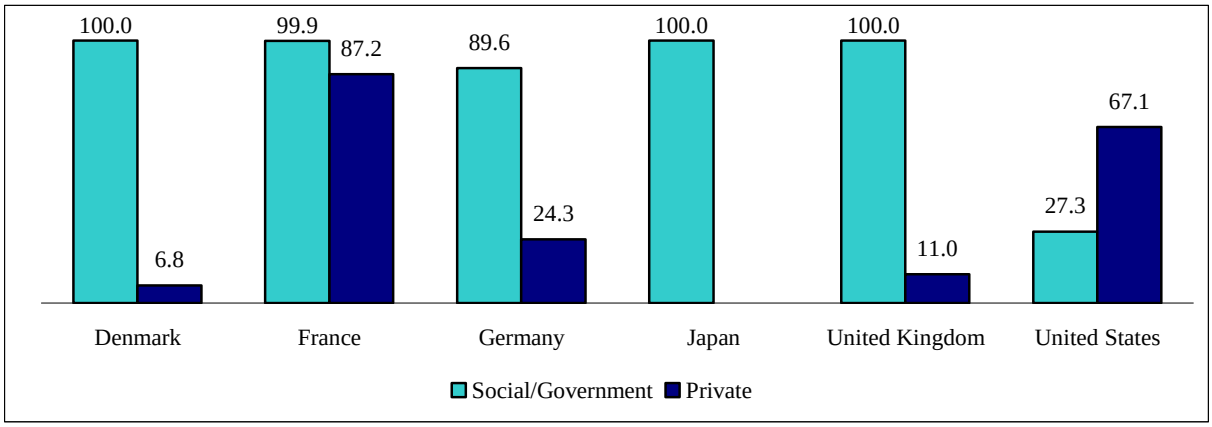
	Union Members / Total Labor Force		
	1980	**1991**	**2001**
Denmark	60%	61%	63%
France	14%	8%	8%
Germany	29%	30%	19%
Japan	22%	19%	17%
United Kingdom	43%	30%	26%
United States	18%	13%	11%

Source: Own illustration, Data: OECD Trade Union Statistics, based on administrative data except for United Kingdom 2001 and United States 1991 and 2001 (survey data)

The U.S. also stands out in the area of health insurance. The U.S., alone among our sample countries in not having universal health insurance coverage, had 47 million people uninsured in 2005, reflecting a steady increase in the number and percentage uninsured since the late 1980s (Figures 6, 7).

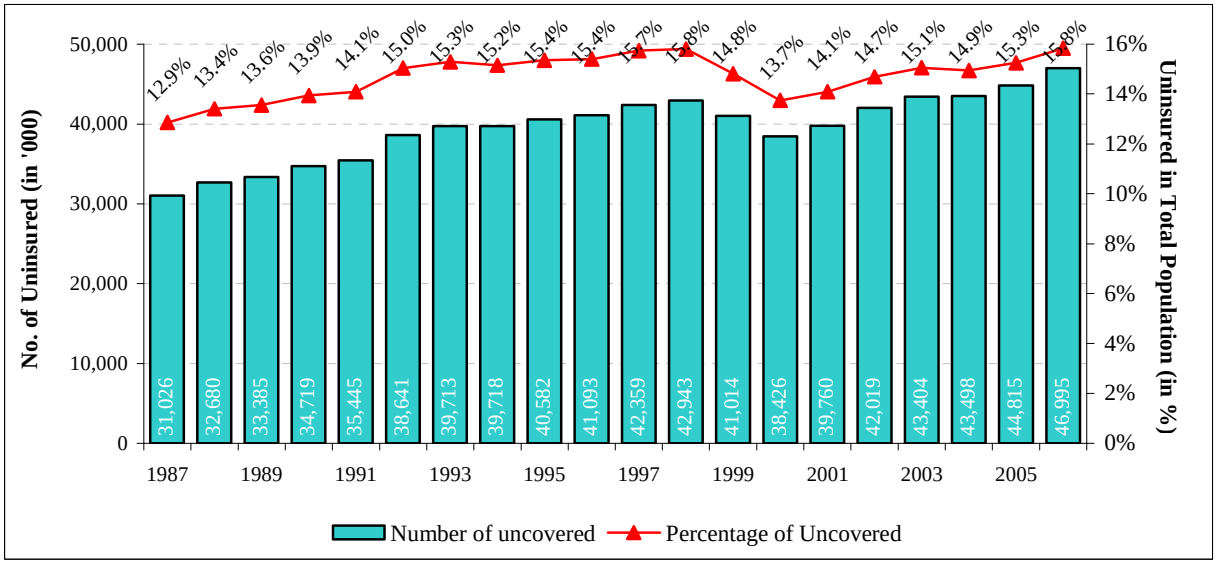
Figure 6: Government and Private Health Insurance Coverage in 2005

(in % of Population)



Source: Own illustration, Data: OECD Health Data. Social health insurance data includes government and social health insurance data. France: Private insurance data for 2004. Japan: Governmental/social insurance data for 2004, private insurance data not available. United States: Private insurance data for 1995 and 2000 from U.S. Department of Commerce Economics and Statistics Administration, U.S. CENSUS BUREAU.

Figure 7: Number of People without Health Insurance in the US



Source: Own illustration. Data: U.S. Census Bureau, Current Population Survey, 1988 to 2007 Annual Social and Economic Supplements. People as of March of the following year. Taken from: Income, Poverty, and Health Insurance Coverage in the United States: 2006 (2007), p.58.

C. Perceptions of Economic Insecurity

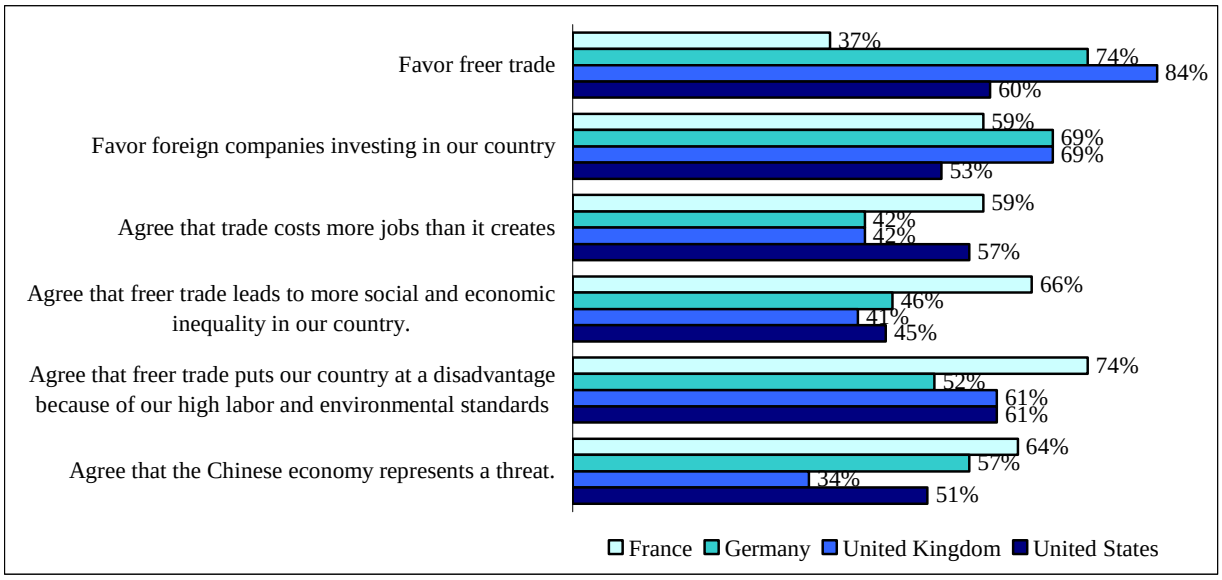
Popular perceptions of economic insecurity do not necessarily reflect the objective indicators in a precise way, but we find a generally high level of fear of globalization among our sample countries and especially in the U.S. and France. According to the German Marshall Fund (2007), 34% of Americans and 38% of Europeans had a negative view of globalization. About half of Americans and Europeans think that "freer trade" results in more job loss than job creation (although between 2005 and 2007 American sentiment turned against freer trade while European sentiment became less skeptical of the employment benefits of trade liberalization). Half of Americans and a slightly higher percentage of Europeans "saw the growth of China's economy as a threat." At the country level, the survey showed that the U.S. and France show the most skepticism toward international trade and investment (see Figure 8). Of all countries surveyed, these two showed the highest percentage who "did not favor FDI," with 40% of Americans and 38% of French. This contrasted with 69% of English and German respondents who favored FDI.[11] In the U.S., 40% expect the next generation will have a lower standard of living, 62% said job security had declined and 59% said they have to work harder to earn a decent living. Most striking, 75% said that "outsourcing work overseas hurts American workers."[12] While this expression of greater economic insecurity was greatest among those with less education, expressions of higher economic insecurity were found for all educational categories.[13]

11 Note that Scheve and Slaughter (2003) find that in the UK over 1991-1999, perceived economic insecurity was higher in those sectors with greater outward FDI.

12 Anderson and Gascon (2007), p. 1

13 Even on the issue of perception of insecurity, there is conflicting evidence. Kierkegaard (2007, p. 11) shows that among European countries there is not a statistically significant relation between "public anxiety" over offshoring (as measured by the Eurobarometer 63 of 2005) and the intensity of offshoring and offshore outsourcing.

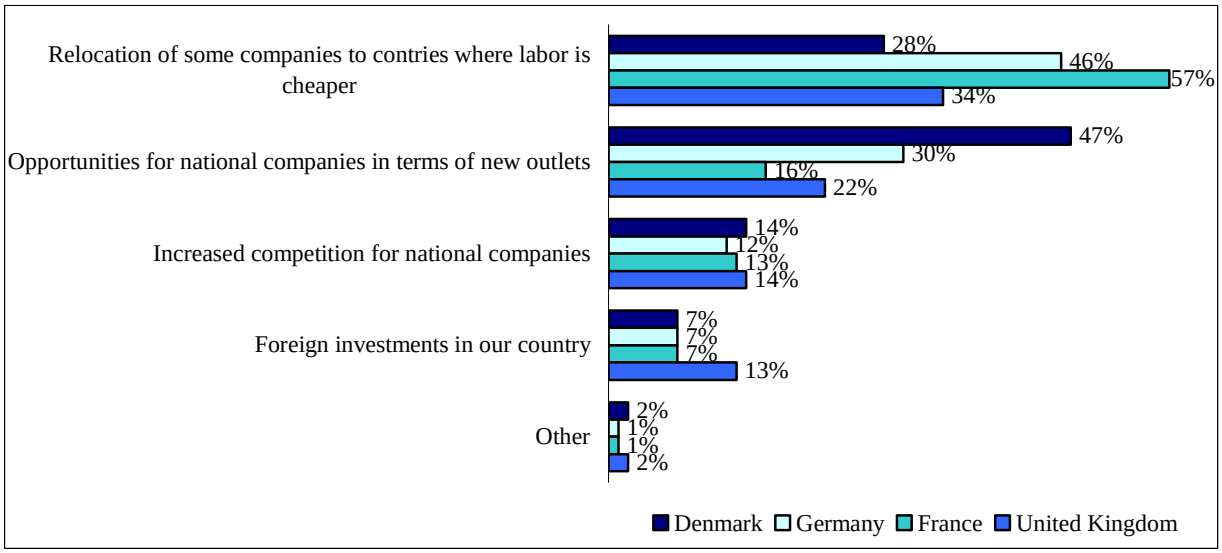
Figure 8: Concerns about Free Trade (in % of Respondents)



Source: German Marshall Fund (2007), Trade and Poverty Reduction Survey, Topline Data October 2007.

Figure 9: The Perception of Globalization (in % of Respondents)

Question: "There are multiple consequences of the globalisation of trade. When you hear the world 'globalisation', what comes first to mind?"



Source: Eurobarometer 67 (2007), Public Opinion in the EU, Fieldwork April-May 2007.

The contrast between perceptions of globalization in France and Denmark is clear from a recent survey that asked "what comes first to mind when you hear the word 'globalisation'?

Fifty-seven percent of French respondents said that the word 'globalisation' evoked the "relocation of some companies to countries where labor is cheaper." Among Danes, 47% responded that globalization evoked "opportunities for national companies in terms of new outlets" (Figure 9).

3. The "New Wave" of Globalized Production

The international trading environment has changed over the 20 year period during which economic insecurity has increased in the industrialized world. The changes reflect political, economic and technological changes that have together encouraged more international trade and foreign investment, altered the structure of trade, and changed the relation between trade and foreign direct investment. Trade occurred increasingly through sophisticated global value chains, as companies in industrialized countries went offshore to perform both manufacturing and services to focus on "core competencies" related to marketing, finance, R&D and design. This has resulted in greater reliance on imports from low-income countries. These changes in the international economy began decades ago and have emerged gradually. Thus we are not seeing a sudden shift in economic relations, but there has been enough change in the amount of internationalization of production to justify our designation of the past 20 years as comprising a "new wave" of globalization. This new wave of globalized production has involved a quantitative and a qualitative shift in the role of international trade. Economists describe the new arrangements as no longer involving just trade in goods and services, but as a "trade in specific tasks."[14] Levy (2005, p. 685) sees offshoring as driven not by comparative advantage but by firms' ability to "coordinate a geographically dispersed network of activities." He notes that offshoring "decouples the linkages between economic value creation and geographic location." In

[14] Grossman and Rossi-Hansberg (2006), p. 60.

other words, offshoring has altered the traditional link between trade and value added. Higher imports, which can lower costs considerably, can thus raise lead firm profits and thus contribute to the rising share of corporate profits in national income. After a brief discussion of the factors that have driven this new wave of globalization, we then turn to an analysis of the variety of linkages between this new wave of globalization and economic insecurity.

A. Political, Technological and Economic Factors

Politically, perhaps the most significant development of this period was the entry into the capitalist world economy former-Communist and other largely-closed economies. The collapse of the Soviet Union and of communist governments throughout Eastern Europe and East Asia, the capitalist turn of communist China's economic plan, and even the opening and liberalization of India's economy, have all served to expand global productive capacity, international trade, foreign investment and international subcontracting. Freeman (2007) has characterized these development as "the great doubling" of the world capitalist system's labor force as it had added 1.3 billion people to the pool of labor seeking work under competitive conditions. Such a labor supply expansion alone, Freeman argues, is enough to dampen wage growth in the rest of the world, including the industrialized countries.

When such a labor supply "shock" occurs in a period of slower demand growth compared to the "Golden Age" period of 1950-1973, the effect on labor markets around the world is likely to be significant. Indeed, one of the lessons of the comparison between the Golden Age and the post-Golden Age is that both the reality and perception of economic insecurity resulting from international trade and investment is lower during periods of more robust macroeconomic expansion, as unemployment and its duration are less and replacement wages of displaced and

rehired workers are higher. As tax revenues generally rise with growth in national income, the macro environment thus also permits greater support for retraining and unemployment insurance.

A second, and related, political development affecting the volume and direction of international trade and investment is the wave of trade agreements, covering more countries than ever in history, that have reduced tariff and non-tariff barriers and most importantly have provided protection for foreign investors. The WTO has quintupled its membership over the original GATT, hundreds of bilateral investment treaties have been signed, and numerous regional trade agreements have gone into effect. These agreements have contributed to the ongoing process of reducing tariffs and non-tariff barriers, but they have also significantly aided the globalization of production by creating protections for foreign investors. As part of this broad liberalization process, the developing world emerged from the era of import substitution to embrace policies promoting export growth within a growing network of international supply chains. For example, export processing zones have expanded in scope and number, offering foreign firms long tax holidays on corporate profits and unrestricted profit repatriation.[15] These regulatory changes generally increased economic security of firms while raising the vulnerability of their developed-country labor forces.

The massive expansion of supply chains internationally, with lead firms investing abroad or subcontracting with foreign producers in search of cost reductions or to better serve local markets, has been given its most important boost by advances in electronic communication, in particular with the integration of computers into mass production, including product design, the management of the supply chain, the monitoring of inventory, sales and distribution, and payroll, finance and accounting. As supply chains developed and supplier firms gained in technological sophistication and scale of operations, the dichotomy between in-house or arm's-length

[15] See Milberg (2007a) for an overview of the expansion of EPZs in the 2000s.

international supply relations has given way to a multiplicity of lead firm/supplier firm relations involving various degrees of investment, technical support, long-term contracting and monitoring. In some cases, large supplier firms – especially in autos, apparel, electronics and services – have captured scale economies and developed modular production systems, enabling them to produce a range of related products, and allowing them to supply inputs and finished goods to many companies within a given sector and sometimes across sectors.[16] In many cases, however, continual entry of new developing country supplier firms has resulted in global excess capacity, declining terms of trade for developing countries' manufacturers, and enhancing the scope for lead firms to induce competition among supplier firms, further lowering lead firm input costs.[17]

The governance structure of these global supply chains has been characterized as "consumer-led" and "producer-led" (Gereffi, 1994). The former are those driven by retail firms or consumer goods firms. Wal-Mart, which alone accounts for 22 percent of U.S. imports from China, is the premier example of a lead firm in a consumer-led chain, but major retailers in all industrialized countries actively control their supply chains.[18] Producer-led chains are typical of those industries that are higher tech or which rely on scale economies. The automobile or commercial aircraft industry typify these chains. Generally speaking, consumer-led chains are more likely to trade with foreign supplier firms at arm's length. Producer-led chains are more likely to expand through foreign direct investment, resulting in intra-firm trade. But there are

[16] On the variety of forms of lead firm-supplier relations, see Gereffi et al. (2005). For a discussion of "modularity" in global supply chains, see Sturgeon (2002). For a study of scale economies in first-tier suppliers, see Applebaum (2002) and Gereffi (2006).

[17] Milberg (2004) calls this the "endogenous asymmetry of market structures in global supply chains." On the terms of trade issue, see recent papers on the "fallacy of composition" in manufacturers export expansion including Mayer (2003) and Blecker and Razmi (2006).

[18] On Wal Mart, see Scott (2007). For a discussion of European retailers' supply chain management strategies, see Palpacuer et al. (2005) and Gibbon (2004).

plenty of exceptions to this profile, as the massive expansion of auto parts supplier firms in the developing world attests.

B. International Trade and Investment

The result of the political, technological and economic factors described above is the rapid expansion of world trade relative to world output. Tables 6a and b show the trade shares for our six sample countries for goods and services, respectively. Since 1991, all countries have expanded their exports and imports relative to GDP. Germany recently overtook the U.S. as the largest goods exporter, especially impressive given the size of the U.S. economy compared to Germany. U.S. imports remain more than double those of the next highest importer. The U.S. highest value of exports and imports of total goods and services, but has the lowest ratio of trade (exports plus imports) to GDP. Services trade, while at much lower levels in terms of value, has expanded in many cases at a more rapid pace than goods trade. In 2005, the U.S. ran a $62 billion surplus in services, while Germany ran a $48 billion deficit.

Tables 6a-b: Exports and Imports of Commodities and Services

Commodities	**Exports**				**Imports**				**Balance**			
	(in Bn. USD)		(in % of GDP)		(in Bn. USD)		(in % of GDP)		(in Bn. USD)		(in % of GDP)	
	1991	**2005**	**1991**	**2005**	**1991**	**2005**	**1991**	**2005**	**1991**	**2005**	**1991**	**2005**
Denmark	37.7	83.3	27.6%	32.2%	34.3	75.0	25.1%	29.0%	3.5	8.3	2.5%	3.2%
France	213.4	434.4	17.2%	20.4%	230.8	476.0	18.6%	22.4%	-17.4	-41.6	-1.4%	-2.0%
Germany	402.7	977.8	22.3%	35.0%	389.1	777.4	21.5%	27.8%	13.6	200.4	0.8%	7.2%
Japan	314.5	594.9	9.2%	13.0%	236.7	515.9	6.9%	11.3%	77.8	79.1	2.3%	1.7%
United Kingdom	182.2	384.4	17.6%	17.5%	209.8	515.8	20.3%	23.5%	-27.6	-131.4	-2.7%	-6.0%
United States	421.7	904.3	7.1%	7.2%	509.2	1,732.3	8.5%	13.8%	-87.5	-828.0	-1.5%	-6.6%

Source: Own calculations, Data: OECD International Trade by Commodities Statistics, International Monetary Fund (IMF), CD-ROM via UNCTAD.

Services	Exports				Imports				Balance		Balance	
	(in Bn. USD)		(in % of GDP)		(in Bn. USD)		(in % of GDP)		(in Bn. USD)		(in % of GDP)	
	1991	**2005**	**1991**	**2005**	**1991**	**2005**	**1991**	**2005**	**1991**	**2005**	**1991**	**2005**
Denmark	14.3	36.3	10.4%	14.0%	10.4	33.4	7.6%	12.9%	3.8	2.9	2.8%	1.1%
France	80.1	116.0	6.5%	5.5%	63.7	106.1	5.1%	5.0%	16.4	9.9	1.3%	0.5%
Germany	64.1	154.9	3.5%	5.5%	90.0	202.9	5.0%	7.3%	-25.9	-47.9	-1.4%	-1.7%
Japan	44.8	110.2	1.3%	2.4%	86.6	134.3	2.5%	2.9%	-41.8	-24.0	-1.2%	-0.5%
United Kingdom	56.3	203.1	5.4%	9.2%	49.0	160.5	4.7%	7.3%	7.3	42.6	0.7%	1.9%
United States	162.6	376.8	2.7%	3.0%	118.1	314.6	2.0%	2.5%	44.5	62.2	0.7%	0.5%

Source: Own calculations, Data: International Monetary Fund (IMF), Balance of Payments, CD-ROM via UNCTAD.
*2004 imports and exports for Denmark.

The new wave of globalized production has meant that the expansion of world trade seen in the past 10-15 years has occurred to a great extent within supply chains. Of course this activity can occur within multinational corporations (leading to intra-firm trade) or in the form of arm's-length relations between buyer and supplier. Evidence shows that both forms of supply chain governance have expanded since the 1980s. The share of world FDI going to low- and medium-wage countries has grown steadily since the mid-1970s. At the same time, the share of intra-firm trade in industrialized country imports has remained relatively constant, indicating that the arm's-length channel has retained its competitive appeal.[19]

In part as a result of the new wave of globalized production, foreign investment patterns have also changed. For one, foreign investment had traditionally been considered a substitute for international trade under the logic of "tariff hopping". Today, foreign direct investment and trade are complementary, since FDI leads to input trade within global supply chains. Second, the globalization of production has reduced to some extent the need for domestic investment in the industrialized countries, since considerable activity now takes place offshore. At the extreme, as mentioned above, lead firms in the supply chains have divested entirely of manufacturing. All the countries in our sample have seen a decline in the ratio of domestic investment out of GDP since

[19] On the location of FDI, see Burke and Epstein (2001) and on intra-firm trade, see Milberg (2004).

the mid-1980s. During the same period, the investment-to-GDP ratio has ballooned in China, a point we discuss in more detail below.

C. Offshoring of Goods and Services

The growth in trade and FDI over the past 20 years is not simply a quantitative shift, but reflects a structural shift which is the accelerated growth of sophisticated supply chains. There has been a rise in offshoring by firms in the industrialized countries. Table 7 shows recent data for Germany, the U.K. and the U.S. These show that goods and services offshoring, measured as amount of imported inputs in total non-energy inputs, rose through the 1990s, with goods offshoring accounting for almost 30% of input use in the U.K., 23% in Germany and over 17% in the U.S. In the cases of Germany and the U.S., these levels reflect slow but steady growth in the reliance on imported inputs of goods, growing about 50% over the ten-year periods considered. For services, the range is much lower (between .8 and 3 percent), but the rates of growth are for all three countries higher than for goods offshoring. As a number of recent studies indicate, services offshoring is likely to continue to expand more rapidly than that of goods in the years to come. These recent increases in offshoring are not new, but in fact continue a trend from the 1980s.[20]

The figures in Table 7 measure trade in inputs and thus may understate the magnitude of trade within global supply chains. Global corporations in the major industrialized countries are not strictly involved in assembly. Much of the import activity in global supply chains is in fully finished goods. In fact the purpose of corporate offshoring, whether at arm's-length or through foreign subsidiaries, is precisely to allow the corporation to focus on its "core competence", while leaving those aspects of product delivery, including production, to others. Many

[20] For some historical data on offshoring, see Campa and Goldberg (1997).

"manufacturing" firms now do no manufacturing at all, providing product and brand design, marketing, supply chain logistics and financial management services. Thus an alternative proxy for offshoring may simply be imports from low-wage countries. These are shown in Table 8. Japan and the U.S. now rely heavily on imports from low-income developing countries (29% and 22% respectively). While the European countries are at much lower levels, all countries have seen more than a doubling of the share of their imports coming from low-income developing countries (see column marked "low-income" in Table 8). The new wave of globalized production can be put in some historical perspective when we consider imports from all developing and transitional economies since 1950, also shown in Table 8. In 1950, these shares were especially high in countries with colonial ties, such as France, the UK, and the US, but also in Germany. The shares declined in the four countries between 1950-1970 and between1970-1991, but showed considerable positive growth rates between 1991-2005, reaching 16% in Denmark, 20% in France, 24% in Germany, 26% in the U.K., 54% in the U.S. and 68% in Japan.

Table 7: Offshoring Intensity in Germany, the UK, and the US 1992-2004

(Imported Inputs as % of Total Non-Energy Inputs)

Goods Offshoring Intensity			
Year	**Germany**	**United Kingdom**	**United States**
1992	-	28.2	11.7
1993	-	29.5	12.7
1994	-	29.8	13.4
1995	12.2	30.7	14.2
1996	12.2	30.7	14.3
1997	14.8	29.7	14.6
1998	14.6	28.0	14.9
1999	15.4	28.0	15.6
2000	19.5	28.6	17.3
2001	19.9	28.1	-
2002	19.7	-	-
2003	20.5	-	-
2004	23.1	-	-
Growth 92-00*	59.1%	1.3%	47.9%
Service Offshoring Intensity			
Year	**Germany**	**United Kingdom**	**United States**
1992	1.0**	1.4	0.2
1993	1.0**	1.6	0.2
1994	0.9**	1.6	0.2
1995	1.0	1.6	0.2
1996	1.1	1.8	0.2
1997	1.2	1.7	0.2
1998	1.4	2.0	0.2
1999	1.7	2.2	0.3
2000	2.0	2.4	0.3
2001	2.3	2.6	-
2002	2.2	-	-
2003	2.1	-	-
2004	2.1	-	-
Growth 92-00	100.0%	76.3%	61.1%

Source: Own calculations for Germany. Data: input-output tables, Federal Statistical Office. *1995-2000 for Germany. ** German service offshoring intensities from 1992 to 1994 use unrevised input-output data.
Service offshoring intensity=$\sum_s$ [(input purchases of service s by sector i)$_t$/(total non energy inputs used by sector i)$_t$]* [(imports of service s)$_t$/(production$_{st}$ + imports$_{st}$ - exports$_{st}$). Weighted average across all sectors i by outputs at time t. Goods offshoring intensity is calculated equivalently.
Calculations for the UK: Amiti and Wei (2005). Data: input-output tables, UK National Statistics, IMF: Balance of Payments Statistics. NB: UK data is not directly available, but can be reconstructed from Figure 2 in Amiti and Wei (2005). Calculations for the US: Amiti and Wei (2006). Data: input-output tables, US National Statistics, IMF: Balance of Payments Statistics.

Table 8: Merchandise Imports by Region of Origin (% of Total Imports)

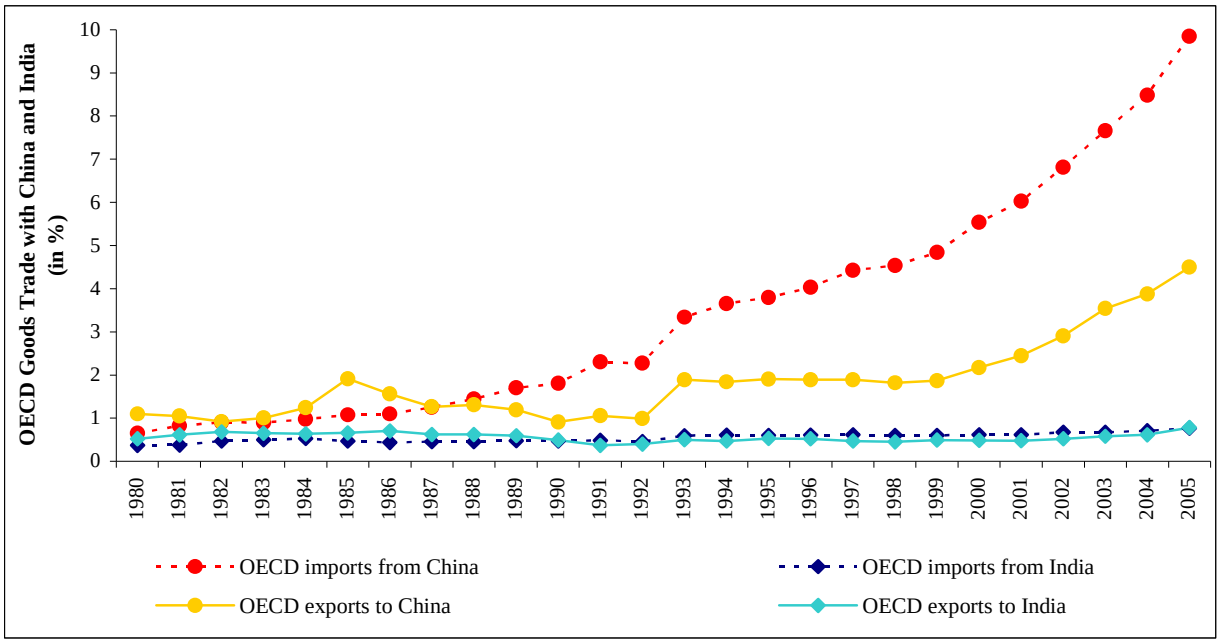
		Developed economies	Developing economies				Economies in transition
			High-Income	Middle-Income	Low-Income	Total	
Denmark	1950	**93.3**	0.9	3.5	0.9	**5.4**	**0.7**
	1970	**88.4**	4.5	3.4	2.6	**10.5**	**1.1**
	1991	**89.8**	3.6	2.4	2.9	**9.0**	**1.2**
	2005	**84.4**	4.7	2.8	6.3	**13.8**	**1.7**
France	1950	**52.7**	9.3	23.9	8.4	**41.6**	**0.4**
	1970	**77.2**	5.8	8.2	6.8	**20.8**	**1.7**
	1991	**80.7**	5.6	5.9	3.8	**15.2**	**1.8**
	2005	**78.8**	4.7	6.3	6.0	**17.0**	**3.2**
Germany	1950	**74.4**	4.8	9.9	9.1	**23.8**	**1.0**
	1970	**79.5**	6.6	6.5	4.5	**17.6**	**2.8**
	1991	**81.6**	5.5	5.1	4.1	**14.6**	**3.7**
	2005	**76.2**	5.0	5.0	8.6	**18.6**	**5.2**
Japan	1950	**60.7**	8.2	8.2	21.5	**37.8**	**0.1**
	1970	**54.4**	13.4	15.3	14.1	**42.9**	**2.6**
	1991	**49.2**	25.1	9.2	14.9	**49.3**	**1.5**
	2005	**32.5**	26.5	10.4	29.2	**66.2**	**1.4**
United Kingdom	1950	**58.3**	8.4	12.5	14.6	**35.5**	**1.8**
	1970	**70.5**	10.2	7.6	8.4	**26.2**	**3.0**
	1991	**84.3**	6.6	4.4	3.0	**14.1**	**1.0**
	2005	**71.8**	8.3	6.7	8.0	**23.0**	**2.6**
United States	1950	**43.2**	15.5	25.0	14.0	**54.5**	**0.7**
	1970	**72.6**	14.0	7.6	5.2	**26.8**	**0.5**
	1991	**59.5**	24.0	7.5	8.6	**40.1**	**0.3**
	2005	**46.2**	22.0	8.7	21.8	**52.5**	**1.3**

Source: Own illustration. Data: UNCTAD. Handbook of Statistics.

China is of course the export powerhouse in this category, and India's boom in business services exports has received much attention. China's export growth to the industrialized countries has been remarkable, especially in the past ten years, reaching 10% of total OECD imports in 2005, and continuing to grow since then (Figure 10). In 2006, the U.S. ran a $235 billion deficit with China, based on imports of $287 billion and exports of $52 billion. Most of these imports were demanded directly by U.S. corporations, such as Wal-Mart, Nike and Mattel and a number of apparel, electronics and automotive companies. About 25 percent of U.S. imports from China are "related party" imports, meaning they are between parties with at least a 5% common ownership interest. Those without affiliates in China often order from large Chinese

contract manufacturers or from vendors who subcontract to Chinese firms. In the electronics sector, Chinese production is dominated by foreign investors from Asia.

Figure 10: OECD Goods Trade with China and India (as % of total OECD Goods Trade)



Source: OECD Employment Outlook 2007, p.110. Data: United Nations, COMTRADE database.

4. Globalization and Economic Insecurity

A. Connecting Globalization to Economic Insecurity

All six of ours sample countries experienced an increase in globalization (by various measures) over the period and in almost all cases our measures of economic insecurity also increased, although the rise in insecurity appears greatest in Germany, Japan and the U.S. Two countries (Denmark and the U.K.) experienced declines in the share of long-term unemployment and also had the lowest growth in involuntary part-time work (see Table 9).

Table 9: Changes in Globalization and in Economic Insecurity, 1991-2005

(compound annual growth rate, unless otherwise indicated)

	Globalization (1991-2005)				
	Exports plus Imports in GDP	KOF Economic Globalization Index	Imports from Low-Income Countries in Total Imports	Goods Offshoring[1]	Service Offshoring[1]
Denmark	1.9%	0.7%	5.6%	n.a.	n.a.
France	1.3%	0.7%	3.3%	n.a.	n.a.
Germany	2.8%	1.2%	5.4%	7.3%	9.2%
Japan	2.8%	0.8%	4.9%	n.a.	n.a.
United Kingdom	1.3%	0.6%	7.3%	0.0%	7.6%
United States	2.0%	0.5%	6.8%	5.0%	6.1%
	Economic Insecurity (1991-2005)				
	Share of Labor Compensation in GDP	Share of Involuntary Part-Time Workers in Total Employment	Share of Long-Term Unemployed in Total Unemployed	ILO Economic Security Index 2004 (Value)	
Denmark	-0.2%	1.1%	-1.4%	0.91	
France	0.0%	1.4%[2]	1.3%	0.83	
Germany	-0.6%	14.6%	3.9%	0.79	
Japan	-0.2%	12.4%	4.7%	0.72	
United Kingdom	-0.2%	0.5%	-1.7%	0.74	
United States	-0.1%	n.a.	4.6%	0.61	

Source: Own illustration. Data: OECD, UNCTAD, KOF Index of Globalization 2008, Federal Statistical Office Germany, Amiti and Wei (2005, 2006).
[1] CAGR for 1995-2004 in Germany, 1992-2001 in the UK and 1992-2000 in the US. [2] 1992 data for France.

When we consider the full set of OECD countries, the association between globalization and economic insecurity remains apparent. In the scatterplots presented in the Appendix, globalization is measured as trade openness, i.e. exports plus imports in GDP (Appendix 1a-c), while offshoring is approximated by the share of imports from low-income countries in a country's total imports (Appendix 2a-c). Economic insecurity is measured as the labor share in national income, the rise in involuntary part-time employment and the increase in the share of long-term unemployed. Without specifying a full econometric model, we nonetheless can see a relation between offshoring and economic insecurity. We see that our measures of globalization

show both positive growth rates between 1991 and 2005, which accounts for all considered OECD-countries. Our measures of economic insecurity also confirm an increasing trend over the last 15 years. The share of compensation in GDP decreased in most of the OECD countries, while the share of involuntary part-time workers in total employment increased. Only the share of long-term unemployed shows ambiguous results.

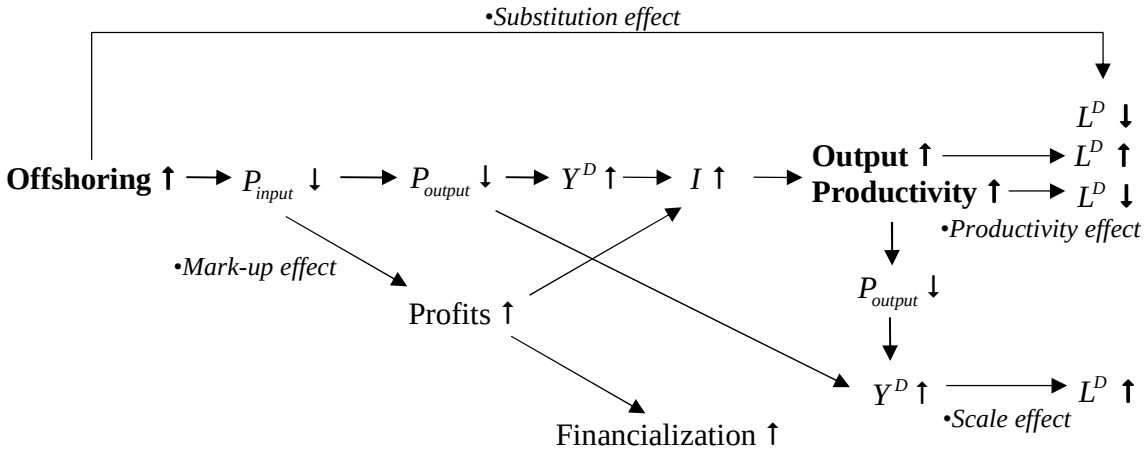
B. A Closer Look at Winners and Losers from Offshoring

Trade liberalization is traditionally understood to create winners and losers, and the new wave of globalization is no different in this regard, although some of the mechanisms and some of the distributional effects may be new. Figure 11 depicts the variety of ways that offshoring impacts the labor market. Offshoring lowers prices of inputs and outputs, raising demand for both and thus the demand for labor too. In addition, lower input prices should raise profit margins and profits, leading to investment that should further raise productivity and output. These gains are labeled the "mark-up," and "scale" effects in Figure 11. Weakening labor demand results from the direct replacement of foreign for domestic labor (the "substitution" effect) and the "productivity" effect which reduces the demand for labor for each unit of output.

Not all of the rise in profits is recycled into investment and labor demand, and this constitutes an important leakage in the system. As we will see below, corporations may also choose to return their net gains to shareholders, and this has occurred through higher dividend payments and share buybacks. This strategy of financialization of the nonfinancial corporate sector also includes the purchase of financial assets and the acquisition of other corporations (merger and acquisition). Financialization represents a drain on labor demand and, as we will see below, may play an important role in the link between globalization and economic insecurity.

Figure 11 is a simplification that considers all labor as one type, and leaves out some potentially significant indirect effects. Thus in addition to the direct effect of offshoring on employment and profits, economic research has also considered the effect of offshoring on different types of labor (skilled and unskilled, through the Stolper-Samuelson effect), the increased sensitivity of labor demand to wage changes at home and abroad and (that is, an increase in the wage elasticity of labor demand), and the greater use of company threats to move production abroad that reduce wage bargaining power and wages. We briefly review the evidence on each of these channels before looking at the overall picture of the relation between globalization and economic insecurity in the industrialized countries.

Figure 11: Gains and Losses from Offshoring



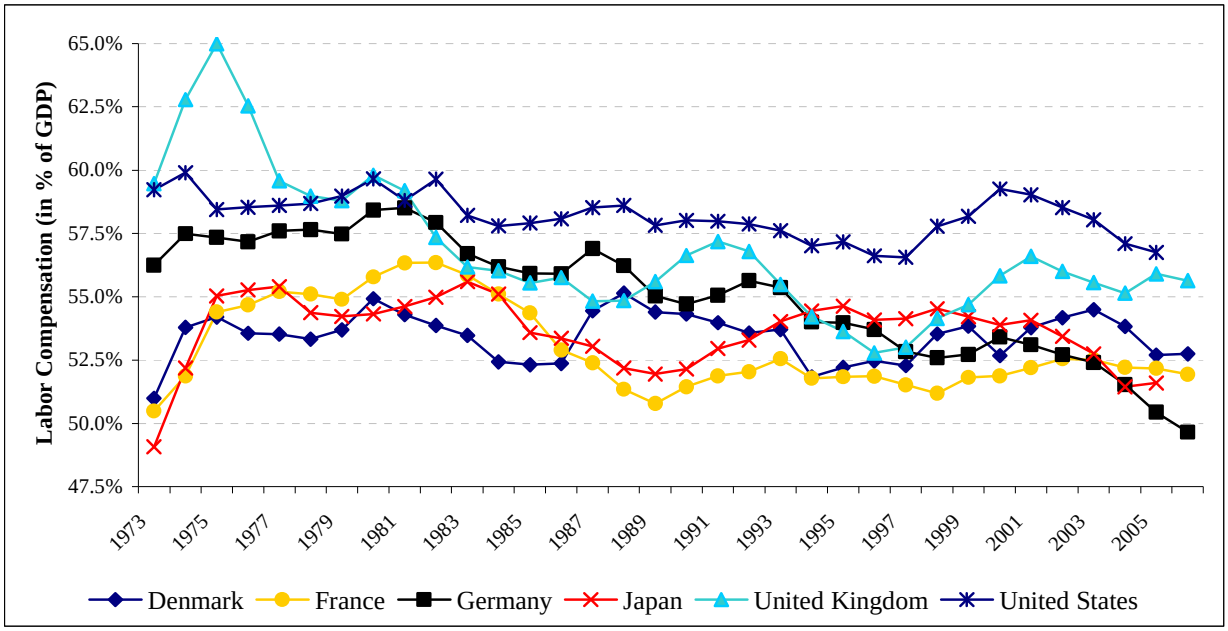
Source: Own illustration. Based on Amiti and Wei (2006) and Milberg et al. (2007).
NB: Y^D = demand for output and L^D = demand for labor.

C. Profits and the Profit Share

The analysis above shows that the gains from the new wave of globalization come in part from the reinvestment of profits gained through cost-reducing offshoring. The process is thus consistent with the rise in the profit share of national income observed across the industrialized

countries. Figure 12 shows the flip side of this, which is the decline in the labor share. Note that the labor share in the U.S. has declined less than the others. This is partly due to the fact that the large levels of CEO compensation in the U.S. including stock options, are officially counted in labor income.

Figure 12: Labor Compensation (in % of GDP)



Source: Own illustration. Data: OECD Annual National Accounts Statistics.

A number of studies have confirmed the role of offshoring in the change in the distribution of income between labor and capital. Most firm-level studies find that offshoring occurs when cost reductions can be achieved of at least 40%.[21] Milberg et al. (2007) find that offshoring intensity is positively associated with sectoral profit shares in the U.S. over 2000-2003. A number of recent papers have taken up the question of trade and the profit share at the aggregate level. Harrison (2002) studies the relation between the trade openness and the functional distribution across a large number of countries and find (contrary to the prediction of Heckscher-Ohlin theory) that openness is generally associated with a lower labor share of

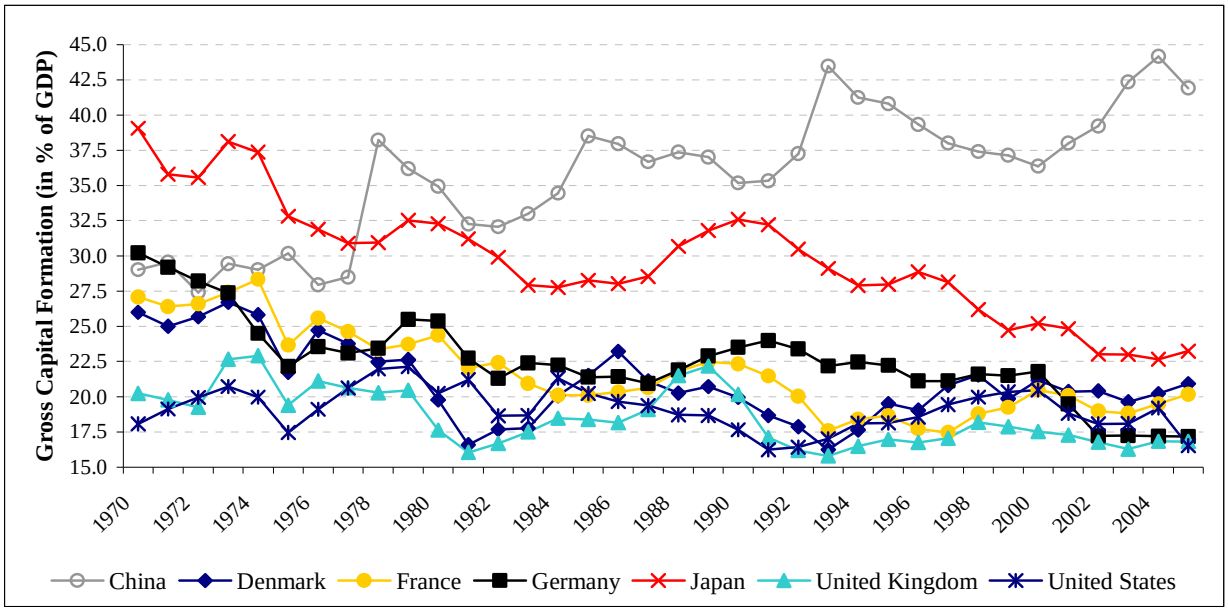
[21] See Milberg (2007b) for a review of these studies.

national income. Harrison concludes that “rising trade shares and exchange rate crises reduce labor’s share, while capital controls and government spending increase labor’s share.” And a study by the IMF (2005) finds that offshoring is a small, but nonetheless negative and significant factor in the determination of the labor share of income for a group of OECD countries. In this same study, three aspects of globalization (related to prices, offshoring and immigration) combined to play a large role in explaining the declining labor share. A study by the Ellis and Smith (2007) finds no connection between openness and the profit share, but links the rising profit share to increased “churning” in the labor market. While the authors attribute this to technological change, it seems likely that it also results from some of the indirect effects of globalization that we discuss below.

It is important to recognize that this rise in income inequality (between wage and capital income) is not inconsistent with the theory depicted in Figure 11 above: that offshoring leads to positive employment growth on net (e.g. Mann, 2003). The key to this view is that the efficiency gains from offshoring be shared between consumers and producers and that both these channels (a rise in quantity demanded due to the price decline and a rise in the cost markup) both should promote greater investment, leading to higher productivity growth, output and employment. The problem is that while profits and profit shares are up, this has generally not been associated with higher rates of investment. That is, as profit shares of national income has risen, the demand for domestic investment has fallen, as seen in Figure 13

There are a number of explanations for the decline in investment out of profits and out of GDP. With respect to the globalization of production, the simple fact is that less investment is needed when significant portions of the production process (goods and services) are moved offshore. Consistent with this, we saw in Figure 13 that as the rate of investment out of GDP has fallen in the industrialized countries, the rate of investment in China has soared.

Figure 13: Gross Capital Formation (in % of GDP)

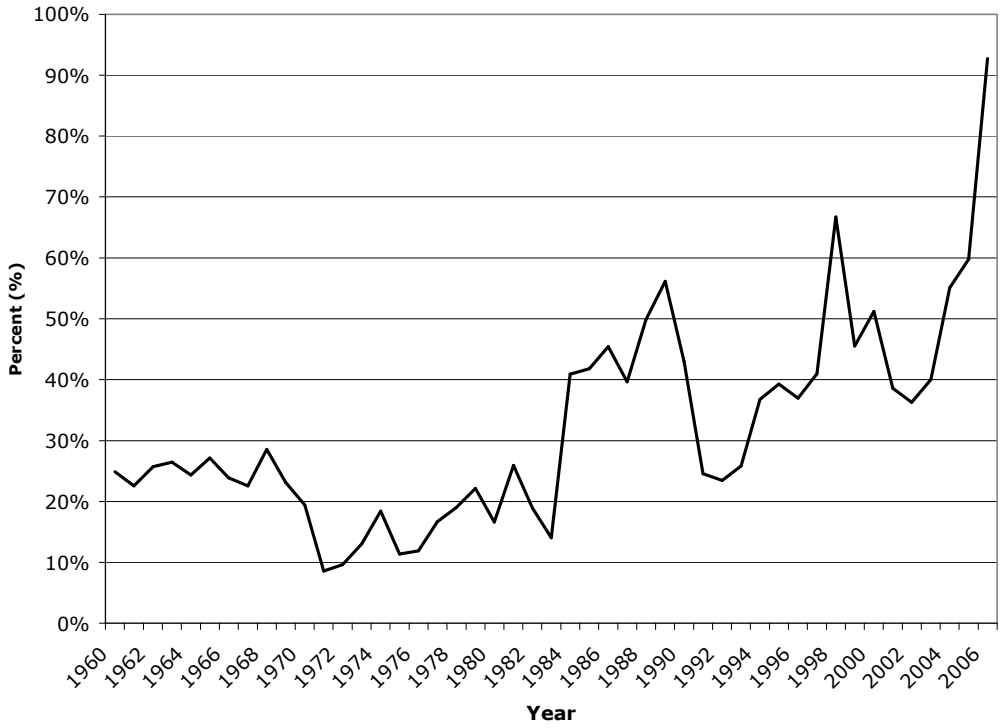


Source: Own illustration. Data: UN DESA Statistics Division, Retrieved from: UNCTAD GlobStat Database.

Another possibility, also shown in Figure 11, is the leakage of profits into finance. According to a number of recent studies, the decline in investment spending in the corporate sector is also tied to the shift in corporate strategy that occurred during the 1980s as the revolution in the assertion of shareholder rights took hold in the U.S. and subsequently elsewhere. Pressure on management was to "downsize" the corporation and "distribute" profits at a greater pace back to shareholders. This process of financialization that occurred in the non-financial corporate sector was supported by the possibility of moving operations abroad through foreign direct investment or, even better, through arm's-length subcontracting. Thus by focusing increasingly on "core competence" and subcontracting (both domestically and internationally) the remainder of the operation, corporate managers were able to reduce domestic investment needs and meet shareholder demands for improvements in shareholder value. Stockhammer (2004) documents a marked increase in the share of non-financial corporations' value added going to interest and dividends since the late 1970s in the U.S., U.K., France and Germany. In an

econometric analysis, the author finds this measure of "financialization" to be associated with declines in business investment. Crotty (2007) finds a similar relation between financialization and investment in a firm-level study of the U.S. non-financial corporate sector. Milberg et al. (2007), also focused on the U.S., shows that the rising profit share due in part to offshoring occurs as the share of investment out of profits fell and the payment of dividends and the purchase of share buybacks rose (see Figure 14).[22]

Figure 14: Dividends plus Share Buybacks as Percentage of Internal Funds, U.S. Non-Financial Corporations, 1960-2006.



Source: Schedule Z.1 of the Flow of Funds Account from the U.S. Federal Reserve Bank online database.

[22] It would appear that the relation between offshoring and financialization is not just in one direction. A study of U.K. and Danish retail firms shows that the financial pressures on the U.K. firms led to much stricter conditions being imposed on foreign suppliers of U.K. firms compared to Danish firms. U.K. retailers were more aggressive in seeking low-cost suppliers and in pressuring suppliers to reduce prices. See Palpacuer et al. (2005) and Gibbon (2002).

D. Job Displacement and Earnings Replacement

There are a variety of ways of studying job loss resulting from international trade. One focuses on old-fashioned direct import competition, that is the employment effects of a change in net exports, where these employment effects are typically based on a comparison of actual employment with employment levels that would have occurred if the trade balance (relative to GDP) had remained unchanged. Sachs and Shatz (1994) had found that trade reduced U.S. manufacturing employment by 5.7% in 1990 and Wood (1994) put the figure at 10.8% for all developed countries, with a relatively larger share of the decline borne by unskilled workers in both studies. In general, these studies thus find employment gains where net exports rise and employment losses where they fall. These studies focus almost exclusively on manufacturing. Thus in our sample of countries for the period 1991-2005, the U.S., U.K. and France experienced increases in their trade deficit in manufacturing, while Denmark, Japan and especially Germany had improvements. The U.S. deterioration has of course been the greatest, and Scott (2007) calculates that the decline in net exports between 2001 and 2006 cost the U.S. the equivalent of 1.8 million jobs.[23]

Another aspect of research looks at the employment effects of foreign direct investment. This admittedly captures only a portion of the offshoring phenomenon, since so much takes place at arm's length. And the research gives ambiguous results. Muendler and Becker (2006) in a study of Germany, and Brainard and Riker (2001) in a study of the U.S. and Fors and Kokko (1999) in a study of Sweden, found a substitution effect between employment at home and in foreign affiliates. Desai, Foley and Hines (2006) and Borga (2005) found complementarity between employment at home and in affiliates for U.S. transnational corporations. Harrison and

[23] Note that the author attributes 11% of this job loss to Wal-Mart's imports alone.

McMillan (2007) find that the effect of FDI on U.S. employment depends on whether the that investment is horizontal or vertical. Horizontal FDI, seeking to serve foreign markets, is found to reduce U.S. labor demand, while vertical FDI, which seeks to reduce costs, increases demand for labor.

An important measure of economic insecurity is the ability of workers displaced by trade to find new work and to not suffer a loss in earnings. Kletzer (2001) has done the most extensive analysis of the re-employment rate and replacement wage for workers displaced as the result of foreign trade. In a study of the U.S. from 1979-1999 she found that earnings losses of job dislocation are large and persistent over time. Specifically, she found that 64.8 per cent of manufacturing workers displaced from 1979-1999 and one-fourth of those reemployed suffered earnings declines of greater than 30%. Workers displaced from non-manufacturing sectors did a little better: 69 percent found reemployment, and 21 per cent suffered pay cuts of 30 per cent or more.

Table 10: Adjustment Costs of Trade-Displaced Workers

Industry	14 European countries: 1994-2001[a]			United States: 1979-1999		
	Share re-employed two years later (%)	Share with no earnings loss or earning more (%)	Share with earnings losses > 30% (%)	Share re-employed at survey date (%)	Share with no earnings loss or earning more (%)	Share with earnings losses > 30% (%)
Manufacturing	57.0	45.8	6.5	64.8	35.0	25.0
High-International-Competition	51.8	44.0	5.4	63.4	36.0	25.0
Medium-International-Competition	58.7	45.7	7.0	65.4	34.0	25.0
Low-International-Competition	59.6	47.3	6.8	66.8	38.0	26.0
Services and Utilities[b]	57.2	49.6	8.4	69.1	41.0	21.0
All sectors	57.3	47.1	7.5	-	-	-

Source: OECD Employment Outlook 2005, Table 1.3, p. 45; and Kletzer, L.G. (2001), Job Loss from Imports: Measuring the Loss, Institute for International Economics, Washington, DC, Table D2, p. 102.
a) Secretariat estimates based on data from the European Community Household Panel (ECHP) for Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain and the United Kingdom. b) Services for Europe.

OECD (2005) did a similar study for 14 European countries for 1994-2001 and found that while re-employment rates in Europe were lower than in the U.S., a much lower share had earnings losses more than 30% upon reemployment and a slightly higher share had no earnings loss or were earning more than before displacement. Table 10 compares the U.S. and European situations for trade-displaced workers.

E. Trade versus Technology: Skill-Biased Labor Demand Shifts

Labor economists seeking to explain the rising income inequality in the industrialized countries over the past 15-20 years looked to technological change as the culprit. The introduction of information technology (IT) and IT-enabled tasks was said to have brought a bias to changes in labor demand, according to which the labor demand for higher-skill workers would grow faster than that for low-skill workers. The result of such "skills-biased technological change" was to raise income inequality as higher-paid workers saw gains while lower-paid workers experienced smaller gains or even, in some cases, decline.

International trade economists then joined the discussion, reformulating the traditional two factor model of trade to apply to a situation of high-skill and low-skill labor.[24] The model (the so-called Stolper-Samuelson theorem of the factor endowments approach) predicted that trade liberalization would raise the relative demand for skilled labor in industrialized countries and thus raise the ratio of wages of skilled labor relative to unskilled labor, consistent with the observed trend in income inequality in these countries.[25] In sum, trade liberalization and technological change were both expected to contribute to rising wage (and thus income)

[24] Wood (1994, 1995) pioneered this effort. He argued that capital could be ignored since with high international mobility it had little differential effect across countries.

[25] According to the Stolper-Samuelson theorem, trade liberalization should benefit an economy's abundant factor relative to its scarce factor. In a world of high- and low-skill labor, the industrialized countries were clearly relatively abundant in skilled labor and thus could expect to see the returns to skill rising in relative terms.

inequality in the industrialized countries. The debate at the time was thus about the relative contribution of these two forces to the observed increases in inequality.

In North-South Trade, Employment and Inequality: Changing Fortunes in a Skill-Driven World and a series of articles, Adrian Wood found that "trade is the main cause of the problems of unskilled workers." (Wood, 1995, p. 57). He identified the main force as the increasing specialization of the industrialized countries in capital-intensive manufacturers, while the developing countries increasingly specialized in the production of labor-intensive. Wood estimates that 75% of the increased wage inequality in the U.S. between 1980 and 1994 was due to trade.

Feenstra and Hanson (1996, 1998, 2001) followed this up with a series of studies applying the model to the case of offshoring. They find that changes in offshoring between 1979 and 1990 explained between 15 and 40% of the rise in the wage of high-skill worker relative to low-skill workers in that period. In a study of manufacturing offshoring in the UK for the period 1970-1983, Benton and Anderson (1999) found that trade accounted for 40% of the rise in the skilled labor share of labor income. Geishecker (2002) in a study of Germany in the 1990s finds that offshoring had a significant negative impact on the demand for low-skilled workers, "explaining 19% and 24% of the overall decline in the relative demand for low-skilled labor." Head and Ries (2000) estimated a similar model for Japan and found "a strong positive correlation between the change in the firm's nonproduction wage share and a firm's share of employment in low-income countries." (Feenstra and Hanson, 2001, p. 28). In their summary paper on the issue, Feenstra and Hanson (2001) found that offshoring accounted for 15-24% of the rise in the "nonproduction wage share" (i.e. the share of wages going to higher-skilled workers), while computer services and other high-tech capital account for between 8% and 31% of the shift to nonproduction labor. The range was a function of different specifications of the model estimated.

As the research on trade versus technology advanced, it became more difficult to assess the relative effects of the two. For one, there has been a debate about the timing of the technological change story.[26] By some accounts inequality began to rise well before much new technology was integrated in production. And inequality actually fell during the late 1990s when the IT boom was strongest. For another thing, it also became clear that trade and technological change are connected, and increasingly so as global supply chains developed. Already in 1995, Adrian Wood wrote that "the pace and direction of technical change may be influenced by trade…So, however one looks at it, trade and new technology are intertwined: no story that excludes one or the other of them is likely to be the whole story." (Wood, 1995, p. 62)

Despite these difficulties, the increased magnitude of – and public concern over – offshoring has spurred much empirical research on the labor market effect of offshoring in the 1980s and 1990s. Table 11 presents a summary of recent research, which covers studies of the U.S., U.K., Germany and a recent study across OECD countries, and includes both manufacturing and services. The recent studies largely support the earlier finding, with both goods and services offshoring leading to growth in high-skill employment and wages growing and declines in low-skill employment and wages.

Some of the most recent research focuses for the first time on services offshoring and considers its effect on overall employment. This focus is important because it gets away from the narrow theoretical confines of the Stolper-Samuelson theorem and the difficulty of testing it, and asks a more general question.[27] Their results are not fully conclusive, but they broadly indicate that across the OECD offshoring has led to reductions in overall employment. Amiti and Wei (2004, 2006) find that services offshoring in the U.S. between 1992 and 2001, reduced

[26] See Gordon and Dew-Becker (2006) section 5 for a discussion.

[27] The theory has not gone uncriticized, both on grounds of relevance (see Samuelson, 2004) and on the grounds of the difficulty of measuring high-skill and low-skill labor (see Howell, 2005), and its weak predictive power for the case of developing (low-skill abundant) countries see, for example, (Berg, 2005).

manufacturing employment by 0.4 to 0.7 percent per year. At a more aggregated level (96 industries), the negative effect disappears. Goods offshoring shows significantly positive coefficients at the aggregated level (96 industries), which becomes insignificant using 450 industries.[28] Amiti and Wei (2005) test the impact of goods and services offshoring on home employment for the UK between 1995 and 2001. Including 69 manufacturing industries, they find a significantly positive correlation between service offshoring and employment citing the same explanation as in their US study. Thus, a 1% increase of service offshoring leads at least to a 0.085% increase in employment. The impact of goods offshoring is ambiguous and insignificant. The study also focused the effects in 9 service industries for the same period. Here, goods and services offshoring show both negative coefficients which are significant in most specifications. However, due to the small sample size the results are less reliable.

Schöller (2007a) analyzes the impact of service offshoring on German employment between 1991 and 2000 for 36 manufacturing industries and finds evidence of a negative impact. Goods offshoring also had a negative influence in some specifications. In a second study, Schöller (2007c) finds that service offshoring reduced manufacturing employment (35 industries) by on average 0.15 and 0.54 percent per year between 1995 and 2004. Goods offshoring shows ambiguous coefficient signs, which reflects a multicollinearity problem with the variable import shares in total output. The effect is mostly negative when import shares are not included.

The OECD (2007b) measures the effects of offshoring for 12 OECD countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Korea, Norway, Sweden, United States). Three types of models are estimated, which all cover 26 manufacturing and service

[28] Most studies on the employment level effects of offshoring refer to the labor demand specification of Hamermesh (1993), where conditional labor demand is derived from a cost function applying Shephard's Lemma. According to Shephard's Lemma, factor demand is determined by the first partial derivative of the cost function with respect to the corresponding factor price, regardless of the form of the production function.

industries for the two years 1995 and 2000, i.e. growth rates from 1995 to 2000 are used in the regressions. The results indicate a significantly negative effect of goods and services offshoring on manufacturing and service employment, respectively.

The perceptions of a strong link between globalization and economic insecurity cited at the beginning of this paper are likely driven both by current reality and by predictions of the future of globalized production. A number of recent studies project potentially very significant expansion of services offshoring. Blinder (2006, 2007a, 2007b) has done a detailed analysis of the U.S. labor force, looking especially at services jobs and the extent to which they are "personally delivered" or "impersonally delivered". Personally-delivered services cannot be delivered electronically, such as child care or garbage collection. Impersonally-delivered services are those that can be delivered electronically without a significant loss of quality. These would include travel reservations and computer support (Blinder 2007a, p. 4). Blinder estimates that 30 to 40 million current jobs are likely in the future to involve impersonally-delivered services and thus be potentially subject to offshoring. This estimate is equivalent to 22%-29% of the current American workforce (Blinder 2007a, p. 18). Blinder's analysis is notable not just because the potential labor market displacement is large, but because the displacement affects all skill levels of the U.S. labor force. Blinder sees the potential wave of offshoring as driving a new industrial revolution, writing that "the sectoral and occupational compositions of the U.S. workforce are likely to be quite different a generation or two from now. When that future rolls around, only a small minority of U.S. jobs will still be offshorable; the rest will have already moved off shore (p. 27)." Blinder's analyis shows that the distinction between high-skill versus low-skill labor which characterizes most of the research to date, may be much less relevant in the near future.

Table 11: Labor Market Effects of Offshoring: Survey of Literature

Source	Country	Industry	Sectors	Years	Effects of Offshoring		
Dependent Variable: Employment					**Goods**	**Services**	**Overall**
Amiti and Wei (2004, 2006)[1]	United States	Mfg.	450	1992-2001	+	-	
			96		+	+	
Amiti and Wei (2005)[1]	United Kingdom	Mfg.	69	1995-2001	+ / -	+	
		Service	9		-	-	
Schöller (2007a)[1]	Germany	Mfg.	36	1991-2000	-	-	
Schöller (2007c)[1]	Germany	Mfg.	35	1995-2004	-	-	
OECD (2007)[1]	12 OECD-count.	Mfg.	} 26	1995, 2000			-
		Service					-
Dependent Variable: High-Skill Employment					**Goods**	**Services**	**Overall**
Feenstra and Hanson (1996)[2]	United States	Mfg.	450	1977-1993	+		
Feenstra and Hanson (1999)[1]	United States	Mfg.	450	1979-1990	+		
Falk and Koebel (2002)[2]	Germany	Mfg.	26	1978-1990	**no ev.**		
Ekholm and Hakkala (2006)[2]	Sweden	Mfg.	20	1995-2000	+[6]		
					+[7]		
Dependent Variable: Low-Skill Employment					**Goods**	**Services**	**Overall**
Falk and Koebel (2002)[2]	Germany	Mfg.	26	1978-1990	**no ev.**		
Geishecker (2002)[2]	Germany	Mfg.	22	1991-2000	-		
Strauss-Kahn (2004)[3]	France	Mfg.	not rep.	1977-1993	-		
Hijzen, Görg, and Heine (2005)[2]	United Kingdom	Mfg.	50	1982-1996	-		
Ekholm and Hakkala (2006)[2]	Sweden	Mfg.	20	1995-2000	-[8]		
Geishecker (2006)[2]	Germany	Mfg.	23	1991-2000	-[9]		
Schöller (2007b)[1]	Germany	Mfg.	28	1991-2000	-	-	
Dependent Variable: High-Skill Wages					**Goods**	**Services**	**Overall**
Feenstra and Hanson (1996)[2]	United States	Mfg.	450	1977-1993	+		
Feenstra and Hanson (1999)[1]	United States	Mfg.	450	1979-1990	+		
Geishecker and Görg (2004, 2007)[4]	Germany	Mfg.	21	1991-2000	+		
Geishecker, Görg and Munch (2008)[4]	Germany	Mfg.	not rep.	1991-2000	-[9]		
	United Kingdom	Mfg.	not rep.	1992-2004	-[9]		
Horgos (2007)	Germany	Overall		1991-2000	+		
		service			+		
		HS-intensive			+		
		LS-intensive			-		

Source: Authors' illustration.
[1]imported inputs / total non-energy inputs [2]imported inputs from same sector / output
[3]vertical specialization [4]imported inputs / output [5]several measures
[6]to low-income countries [7]inhouse-offshoring [8]medium-skill employment [9]to CEECs

F. Increase in the Elasticity of Demand for Labor

Skills-biased labor demand is not the only channel through which offshoring affects economic insecurity. Rodrik (1997) posited that trade liberalization would likely shift the relative demand for different types of labor, but moreover that greater openness to international trade would also raise the sensitivity of labor demand (the wage elasticity of labor demand) to changes in domestic or foreign wages. This increased sensitivity of employment to both domestic and foreign wage movements is enhanced as global supply chains become more developed and offshoring increases. The situation is described by Anderson and Gascon (2007, p. 2):

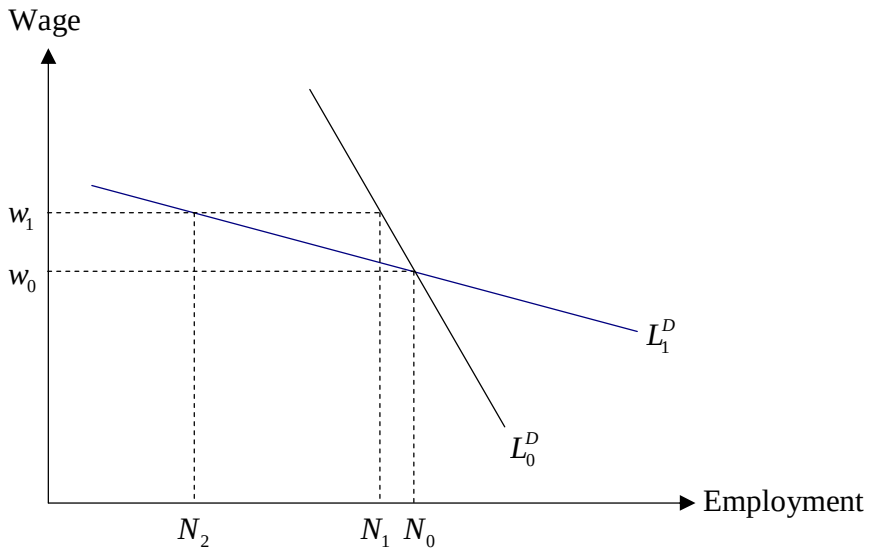
> "Traditionally, trade is thought of as exchanging different goods across nations, not the shifting of production from one country to another, followed by return shipments back to the original country. For example, in the past, U.S. firms would export good x and import good y. In the New Economy, U.S. firms export the capital k needed to produce good x to a country with lower production costs and then re import good x. Theoretically, disaggregating the value chain has allowed U.S. business to substitute cheaper foreign labor, increasing firms' own price elasticity of demand for labor, raising the volatility of wages and employment, which increase worker insecurity."

Figure 15 shows the importance of an increase in the elasticity of labor demand. The steeper curve (L_0^D) represents the original, more inelastic labor demand conditions, and the flatter labor demand curve (L_1^D) is more elastic. A given change in the wage has more impact on the quantity of labor demanded in the elastic case than in the inelastic case.

There have been very few estimates of the relation between trade openness and the wage elasticity of labor demand . Slaughter (2001) studied U.S. manufacturers in the period 1960-1991 and found that the labor demand elasticity rose for U.S. production workers (a proxy for lower-skill workers) and not for non-production workers over this period. The demand for production workers rose most in those sectors with the greatest increases in offshoring, as well as those with more technical change in the form of more computer related investment. Scheve and Slaughter

(2003) found that FDI is the key aspect of globalization that raises the elasticity of labor demand. In a study of outward FDI by U.K. firms, they found that higher FDI is associated with a higher labor demand elasticity, and more volatility of wages and employment.

Figure 15: Employment and the Elasticity of Labor Demand



Source: Own illustration.

G. Threat of Job Loss and Wage Suppression

A less direct channel for globalization and especially offshoring to influence wages and job security is the threat by companies to move production overseas. Freeman (1995, p. 21) describes the phenomenon:

"It isn't even necessary that the West import the toys. The threat to import them or to move plants to less-developed countries to produce toys may suffice to force low-skilled westerners to take a cut in pay to maintain employment. In this situation, the open economy can cause lower pay for low-skilled westerners even without trade."

A few researchers have explored the importance of firms' threats to move production abroad on the bargaining power and demands of labor. The issued had received considerable

attention by theorists, but has undergone little empirical analysis.[29] Bronfenbrenner and Luce (2004), studying the U.S. between 1993 and 1999, focuses more narrowly on unionization campaigns as opposed to wages. She finds that a firm's mobility did raise the credibility of the threat to move production offshore and that this influenced union election, with unionization drives having a much lower rate of success in firms with a credible threat of mobility than in those considered immobile. Choi (2001) looked at detailed outward foreign direct investment by U.S. manufacturers and found that increased outward FDI was associated with lower wage premiums for union members during the period 1983-1996.

5. Conclusion and Prospects for the Future

We have shown that the new wave of globalization has raised worker insecurity in the industrialized countries, heightening inequality between high and low-skill workers, reducing employment and wage growth and lowering the overall labor share of national income. But vulnerability does not translate directly into economic insecurity. This depends on household efforts to reduce the risk of sudden loss and on national policies to absorb such risks. The decline in household saving supported with massive expansion of household debt in many cases reflects in part the effort by households to buffer themselves from income shocks.

Different industrialized countries have implemented very different sets of policies, and we have identified five "models". On one extreme is the U.S. and other Anglo-Saxon economies with lax hiring and firing regulations, low unemployment benefits, and very limited spending on active labor market policies. On the other extreme is the Rhineland model including France and Germany, who have relatively high levels of employment protection, large unemployment benefits and significant spending on active labor market programs. Denmark (and a few other

[29] See Burke and Epstein (2001) for an overview and Rodrik (1999) for a game-theoretic approach.

countries) seem to have found an effective combination of the two, with its model of "flexicurity", comprising labor market flexibility with high replacement income programs for the unemployed and extensive active labor market programs. France and Germany have moved toward flexicurity, but are still quite a distance from a Danish-type system.

Our analysis of offshoring indicates, however, that flexicurity as a way of managing state-market relations in a globalized economy is likely not sufficient over the longer run to maintain high levels of economic security. For this, the macroeconomic effects of offshoring must be rechanneled away from finance and towards the domestic reinvestment of efficiency gains from offshoring. Tighter labor markets driven not by unsustainable consumer debt but by productivity-enhancing private investment is the long-term key to "sharing the gains" from globalization.

This conclusion raises a question about the feedback from policy to international competition. It is often heard that greater state-provided social protection constitutes a cost to producers that reduces international competitiveness. The evidence, however, indicates that the opposite may be true. That is, the provision of a high level of social protection does not unambiguously reduce export competitiveness and in some cases may increase it. In a study of the OECD over the period 1978-1995, Milberg and Houston (2005) find that there are multiple paths to export competitiveness for industrialized countries, a "high-road" relying on innovation, high productivity and high levels of compensation and job security resulting from labor management cooperation and state support for economic security, and a "low road" path where productivity growth hinges on a high degree of conflict between labor and management rooted in job insecurity and a weak role for the state in guaranteeing social protection.[30] This conclusion would seem to apply in even stronger form for the six country sample in this paper. Denmark and Germany, two countries with greater state intervention in sharing the burden of insecurity have

[30] Belloc (2004) finds a similar result.

increased their trade surpluses considerably over the past 15 years, while the Anglo-Saxon countries in the sample have experienced massive trade balance deterioration.

The new wave of globalization has put into question traditional (Anglo-Saxon and Rhineland) arrangements between states and markets and has increasingly expanded the share of the population subject to economic insecurity to now include high-skill and service sector workers. Over the past 15 years, import growth within the context of the new wave of globalization have supported a rise in profits and in the profit share, a relatively slow growth of wages and heightened inequality. One explanation of the industrialized countries' commitment to trade liberalization – outside of the agriculture sector – is that the benefits have been distributed in a highly concentrated fashion. In an environment of rising economic insecurity, liberal trade policies can be expected to come under continued pressure in democratic societies. This could take a variety of forms, from a dangerous protectionist backlash, to a progressive tax shift which redistributes from winners to losers, to a new set of regulations on financial activity, since this latter seems itself to be supported by the new wave of globalization.

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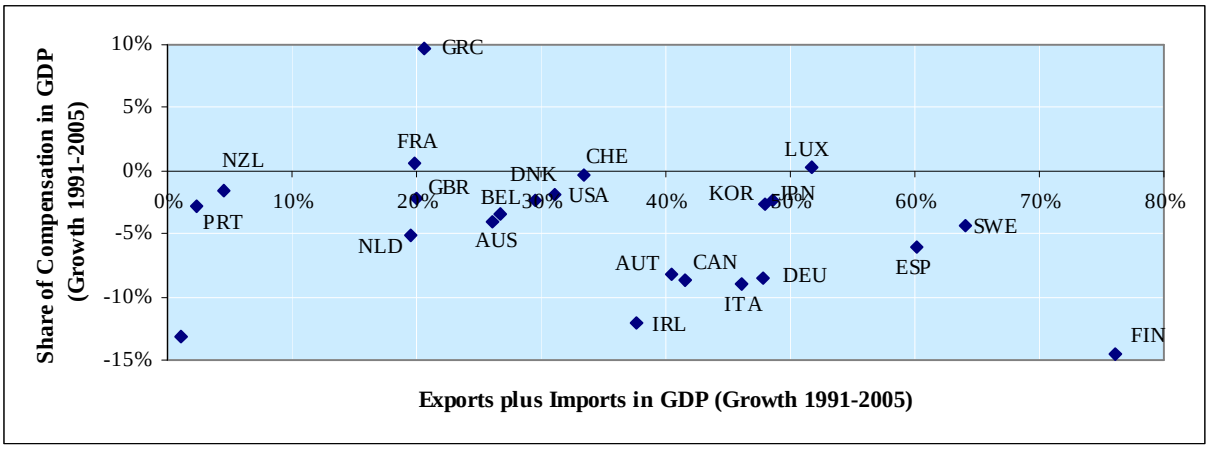
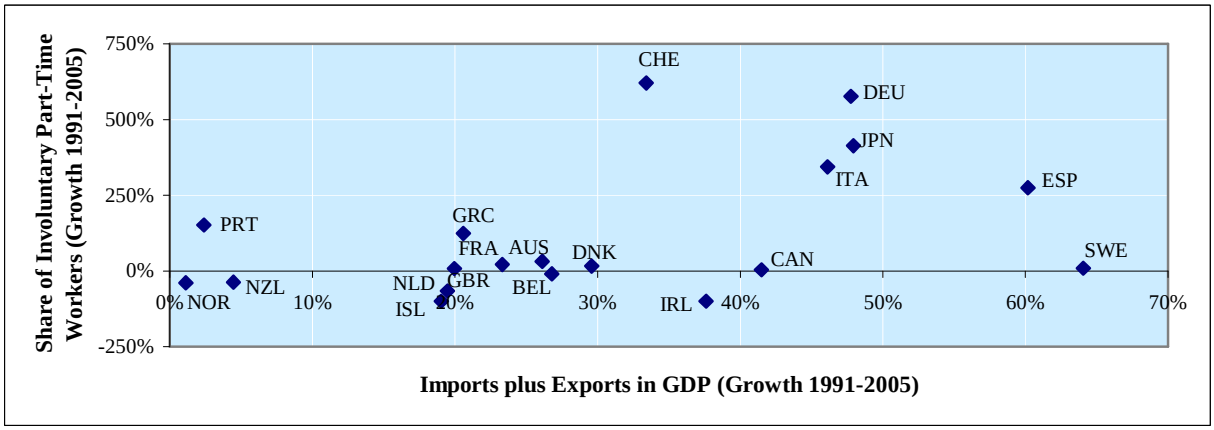
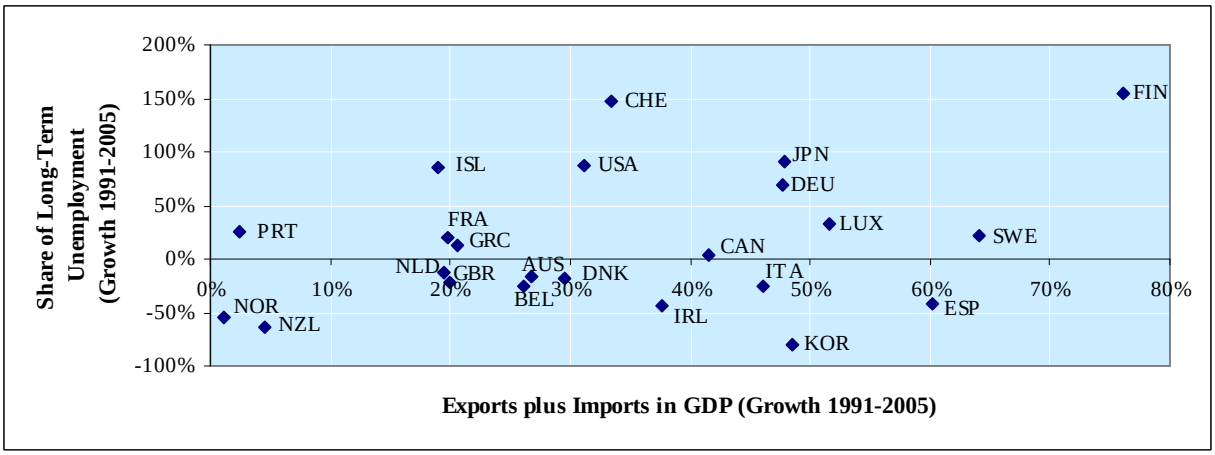
Appendix 1: Trade Openness and Economic Insecurity



Source: OECD. NB: 23 OECD-countries included. Portugal's share of compensation in GDP growth was calculated for 1991-2004.

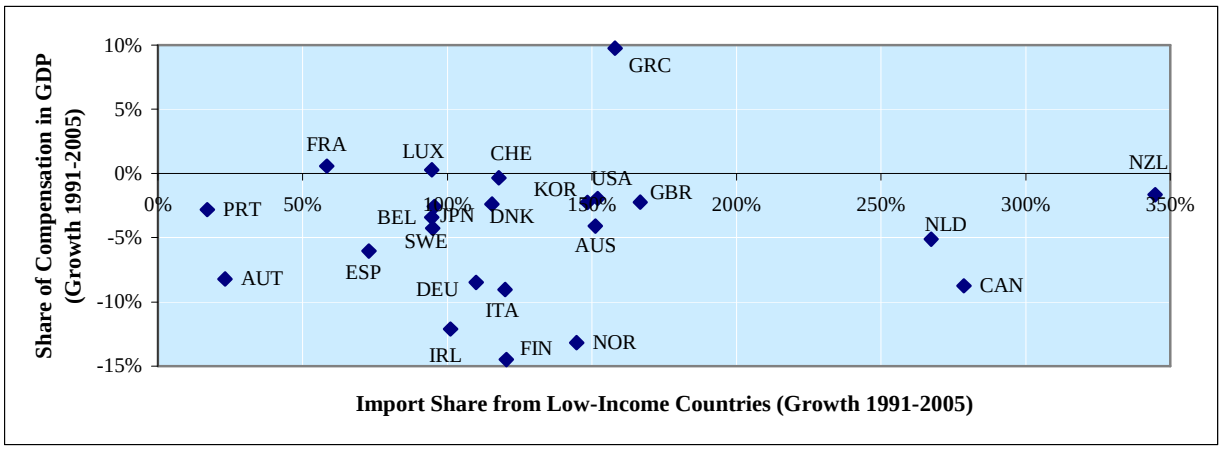


Source: OECD. NB: 19 OECD-countries included. NB: 1992 data for France.

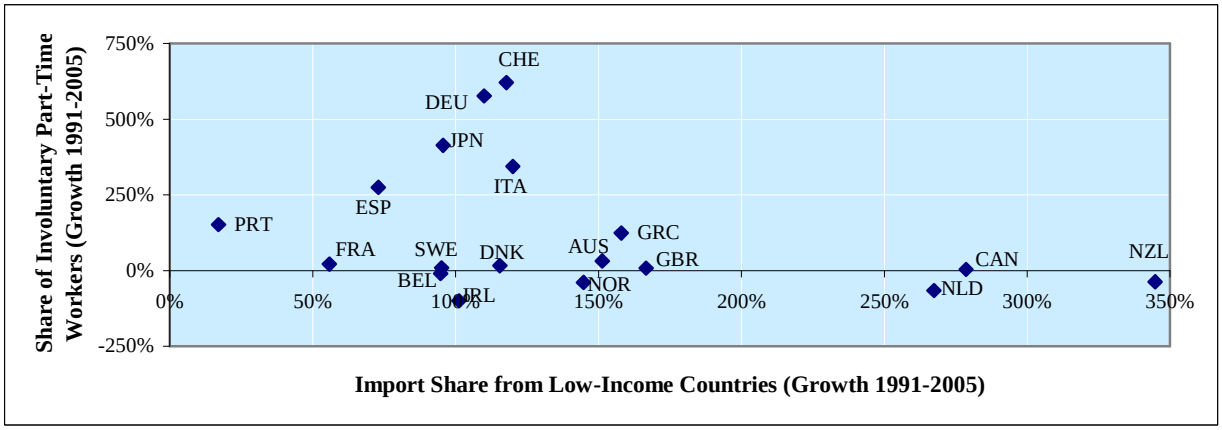


Source: OECD. NB: 23 OECD-countries included.

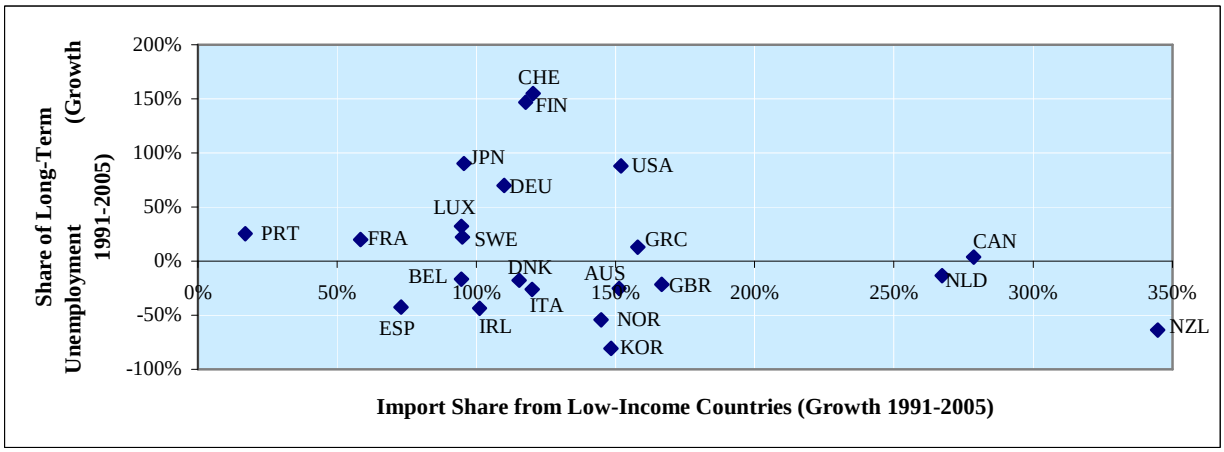
Appendix 2: Imports from Low-Income Countries and Economic Insecurity



Source: OECD, UNCTAD. NB: 23 OECD-countries included. Portugal's share of compensation in GDP growth was calculated for 1991-2004.



Source: OECD, UNCTAD. NB: 18 OECD-countries included. NB: 1992 data for France.



Source: OECD, UNCTAD. NB: 22 OECD-countries included.