



Materialien zu Wirtschaft und Gesellschaft

The Effects of Globalization on Income
Distribution:

A Literature Review and Implications
for Europe and Austria

Özlem Onaran

100

Materialien zu Wirtschaft
und Gesellschaft Nr. 100

Herausgegeben von der Abteilung Wirtschaftswissenschaft und Statistik
der Kammer für Arbeiter und Angestellte
für Wien

**The Effects of Globalization on Income Distribution:
A Literature Review
and
Implications for Europe and Austria**

Özlem Onaran

Februar 2007

Die in den Materialien zu Wirtschaft und Gesellschaft
veröffentlichten Artikel geben nicht unbedingt die
Meinung der AK wieder.

Die Deutsche Bibliothek – CIP-Einheitsaufnahme

Ein Titeldatensatz für diese Publikation ist bei
der Deutschen Bibliothek erhältlich.

ISBN [978-3-7063-0335-4](#)

© Kammer für Arbeiter und Angestellte für Wien
A-1041 Wien, Prinz-Eugen-Straße 20-22, Tel: (01) 501 65, DW 2283

Kurzzusammenfassung

Diese Studie untersucht die existierende Literatur zum Einfluss der Globalisierung auf den Arbeitsmarkt und die Einkommensverteilung einerseits zwischen Arbeit und Kapital sowie andererseits innerhalb des Faktors Arbeit (zwischen den diversen Sektoren, aber auch zwischen qualifizierten und unqualifizierten ArbeitnehmerInnen) in den entwickelten Ländern, insbesondere in den alten EU-Ländern, sowie in Österreich.

Zwei Aspekte der Globalisierung werden analysiert: internationaler Handel sowie ausländische Direktinvestitionen (FDI). Die Auswirkungen internationaler Verlagerungen (Outsourcing) werden in diesem Zusammenhang ebenfalls untersucht.

Für die Analyse der Verbindungen zwischen Globalisierung und Arbeitsmarkt wurden drei grundsätzliche Zugänge gewählt: 1. Außenhandelstheorie, 2. Arbeitsökonomie, 3. Politische Ökonomie.

Alles in Allem enthält die empirische Literatur über Europa und die USA Hinweise darauf, dass Handel negative Auswirkungen hat auf den Arbeitsmarkt in jenen Branchen, die Importkonkurrenz ausgesetzt sind, und besonders auf die niedrig qualifizierten Arbeitskräfte, sei es durch direkte Effekte oder indirekt durch handelsbedingte technologische Effekte.

Ein weiteres interessantes Ergebnis, das in der Literatur zu finden ist, ist die Tatsache, dass die negativen Handelsauswirkungen nicht nur auf den inter-industriellen Handel mit Niedriglohnländern zurückzuführen sind, sondern auch auf intra-industriellen Handel mit entwickelten Ländern. Die Untersuchungsergebnisse weisen diesbezüglich aber signifikante Heterogenität auf und zeigen, dass die Zusammensetzung und die Herkunft der jeweiligen Importe berücksichtigt werden müssen.

Schließlich, wenn Handel oder Kapitalmobilität die Elastizität der Arbeitskräftenachfrage sowie die Verhandlungsstärke der ArbeitnehmerInnen beeinflussen, dann führt dies nicht nur zu einer Verschiebung der Arbeitskräftenachfrage bzw. der Lohnverhandlungskurve, sondern verändert auch die Reagibilität der Beschäftigung auf die Produktion und die Löhne, sowie jene der Löhne auf Produktivität und Arbeitslosigkeit. Viele Studien kommen daher zu dem Ergebnis, dass die Auswirkungen einer Außenöffnung auf den Arbeitsmarkt größer sind als die Daten suggerieren und zudem eng verbunden sind mit einer generellen Verschiebung der Lohnverhandlungspositionen und der Arbeitskräftenachfrage in einer Zeit intensiven Wettbewerbs und hoher Kapitalmobilität. Daher ist es im Grunde nicht die Marktöffnung an sich, sondern sind es die Bedingungen unter denen sie stattfindet – d.h. die Verschiebung der Kräfteverhältnisse als Folge der Außenöffnung - die dem Faktor Arbeit schaden. Wenn dies so ist, sollte die Wirtschaftspolitik dieser Frage mehr Aufmerksamkeit widmen.

Bezüglich Österreich können die empirischen Ergebnisse über die arbeitsmarktbezogenen Auswirkungen der Globalisierung folgendermaßen zusammengefasst werden: Was die Auswirkungen des Außenhandels (Gesamt-, Endverbrauch und Intermediärgüterhandel) auf die Gesamtbeschäftigung (oder Arbeitslosigkeit) betrifft, so können gar keine oder nur minimale Auswirkungen von Importen gefunden werden (Aiginger et al., 1996; Winter-Ebmer und Zimmermann, 1998; Hofer und Huber, 2003); andererseits gibt es aber einen negativen Effekt für

niedrig qualifizierte Arbeitskräfte, ältere ArbeitnehmerInnen und ArbeiterInnen mit Niedriglohn (Aiginger et al., 1996; Hofer und Huber 2003), sowie für die Niedriglohnindustrie und für die Bereiche mit einem AusländerInnen-Anteil (Winter-Ebmer und Zimmermann). Es gibt nur einen sehr kleinen oder insignifikanten Einfluss von Exporten auf die Beschäftigung (Aiginger et al., 1996; Winter-Ebmer und Zimmermann, 1998; Hofer und Huber, 2003). Was Löhne betrifft, so gibt es Hinweise auf einen negativen Effekt der Importe und auf einen geringen positiven Effekt der Exporte (von und nach dem Osten) auf Basis von Individualdaten (Aiginger et al., 1996), und keine Auswirkungen durch Importe aus dem Osten sowie positive Auswirkungen von Exporten in den Rest der Welt auf Branchenebene (Winter-Ebmer und Zimmermann, 1998). Mobile Arbeitnehmer spüren geringere negative Auswirkungen von Importen auf ihre Löhne und positive Auswirkungen von Exporten (Aiginger et al., 1996).

Es gibt keinen nachweisbaren Einfluss auf die Gehälter von Angestellten, jedoch sehr wohl einen positiven Export- und negativen Import-Effekt auf die Löhne von ArbeiterInnen (Hofer und Huber). Was die relative Beschäftigung zwischen hoch qualifizierten und niedrig qualifizierten Arbeitskräften betrifft, so sind positive Auswirkungen durch Exporte und negative Auswirkungen durch Importe (mit Ausnahme des Outsourcings nach Osteuropa) festzustellen (Egger und Egger, 2003). Outsourcing in die Mittel- und Osteuropäischen Länder (MOEL) führte zwar zu einer Steigerung der relativen Beschäftigung und der Löhne der hochqualifizierten Arbeitnehmer im Vergleich zu den niedrig qualifizierten Arbeitnehmern (Egger und Egger, 2003; Egger et al. 2001), gleichzeitig gibt es aber auch ein umstrittenes Untersuchungsergebnis, das einen negativen Effekt des gesamten Outsourcings auf die relative Beschäftigung und die relativen Löhne der hoch qualifizierten Arbeitnehmer belegt. Dies kann als Hinweis gewertet werden, dass Österreich ein Land mit knapper Ausstattung an Humankapital ist (Lorentowicz et al., 2005; Marin 2004)). Es deutet Einiges darauf hin, dass die MOEL –Filialen multinationaler Firmen aus Österreich komplementär zu österreichischen Firmen sind (Marin, 2004) und es keine nachteiligen Einflüsse gibt von den Gehältern der MOEL-Tochtergesellschaften auf die Beschäftigung in den Muttergesellschaften; Hingegen finden Bellak und Altzinger (2001) einen negativen Effekt der Umsätze der MOEL-Tochtergesellschaften auf die Beschäftigung in den Muttergesellschaften. Dieses Ergebnis ist im Gegensatz zu Marin (2004), die keinen Einfluss gefunden hat. Simulationsergebnisse über die Auswirkungen der Osterweiterung oder des Handels mit MOE-Ländern deuten einerseits auf eine leichte Verschiebung der funktionellen Einkommensverteilung zu Lasten der Lohnabhängigen und zu Gunsten der Arbeitgeber hin (Breuss und Schebeck, 1999), andererseits auf einen negativen Effekt sowohl von Finalgüterhandel als auch von Outsourcing nach Osteuropa auf niedrig qualifizierte Arbeitskräfte; weiters einen negativen Effekt des Fertigwarenhandels auf die Löhne qualifizierter ArbeitnehmerInnen in den von verstärkter Importkonkurrenz betroffenen Branchen und weiters einen positiven Effekt von Outsourcing auf die Löhne qualifizierter Arbeitskräfte insgesamt (Kratena, 2006). Zu guter Letzt gibt es aber noch ein anderes Resultat, das auf ein Sinken der relativen Löhne von qualifizierten und unqualifizierten Arbeitskräften hinweist (Keuschnigg und Kohler, 2002).

The Effects of Globalization on Income Distribution: A Literature Review and Implications for Europe and Austria

Executive Summary	- 3 -
1 Introduction.....	- 7 -
2 Conceptual framework.....	- 9 -
2.1 Trade theory	- 9 -
2.1.1 Alternative approaches in trade theory	- 10 -
2.1.2 Trade theory, FDI and outsourcing.....	- 11 -
2.2 Labor economics approaches to trade effects	- 12 -
2.2.1 Factor content analysis.....	- 12 -
2.2.2 Institutional and micro approaches	- 13 -
2.3 Political economy.....	- 13 -
3 Empirical literature on the US and Europe	- 18 -
3.1 Effects of trade on sectoral or relative employment and wages	- 18 -
3.1.1 US: evidence and methodological debates	- 18 -
3.1.2 Europe and other OECD countries	- 20 -
3.2 Outsourcing, FDI, and eastern enlargement	- 23 -
3.3 Labor's share and globalization: political economy	- 25 -
4 Empirical literature on Austria: the impact of trade, outsourcing, and FDI on labor market outcomes.....	- 28 -
4.1 Descriptive evidence.....	- 28 -
4.2 Empirical findings.....	- 31 -
5 Economic policy debate.....	- 41 -
5.1 Mainstream Approach.....	- 41 -
5.2 Labor Organizations and Political Economy Approaches.....	- 43 -
6 Implications for future research.....	- 47 -
References.....	- 49 -

Abstract

This study reviews the literature on the effects of globalization on labor market outcomes and income distribution between labor and capital and within labor –across sectors and between high-skilled and less-skilled labor- in the developed countries, and in particular the old member states of the EU and specifically Austria. Two aspects of globalization are analyzed: international trade and foreign direct investment (FDI). International outsourcing effects will also be reviewed in this context. The concerns regarding the links between globalization and labor market outcomes have been analyzed within three broad lines of approaches:

1. Trade theory, 2. Labor economics, 3 Political economy.

Overall in the empirical literature about Europe as well as the US, there is some evidence that trade leads to job and income losses for workers in import competing industries and in particular for the less skilled labor either through direct effects or trade induced technology effects. Another important finding in the literature is that the negative trade effect stems from not only inter-industry trade with low wage countries but also intra-industry-trade with developed countries. But research results point at significant heterogeneity in that respect, and show that the composition and origin of imports do matter.

Finally, if trade or capital mobility affects the elasticity of labor demand and the bargaining power of labor, this then not only leads to a shift in the labor demand or wage bargaining curve, but also changes the responsiveness of employment to production and wages, and wages to productivity and unemployment. Many studies conclude that the effects of openness on labor market outcomes are beyond what the volumes indicate, and are related to a general shift in the terms of bargaining and labor demand in an era of intense competition and high capital mobility. Thus it is not openness per se, but the conditions under which it takes place –i.e. the shift of balance of power relations implied by openness- is what may be hurting labor. Then the policy debate must also focus in this area.

In Austria the empirical findings on the labor market effects of globalization can be summarized as follows: Regarding the effects of trade on total employment either no or small impact of imports are found (Aiginger et al., 1996; Winter-Ebmer and Zimmermann, 1998; Hofer and Huber 2003); but a negative effect exists for blue-collar workers, the elderly, and low income workers (Aiginger et al.; Hofer and Huber), or in low wage industries and in industries with a higher share of foreign workers (Winter-Ebmer and Zimmermann). There is a minor or insignificant impact of exports on employment (Aiginger et al.; Winter-Ebmer and Zimmermann, Hofer and Huber). Regarding wages there is evidence of a negative effect of imports and a small positive effect of exports (from and to the East) based on individual data (Aiginger et al. 1996), There is no effect on white collar wages, but a positive export and negative import effect on blue-collar wages (Hofer and Huber). Outsourcing to the CEECs lead to an increase in the relative employment and wages of high-skilled to low-skilled labor (Egger and Egger 2003; Egger et al. 2001), but there is also a controversial finding showing a negative effect of total outsourcing on relative employment and wages of the skilled, which also indicates that Austria is a human capital scarce country (Lorentowicz et al. 2005; Marin, 2004). There is some evidence that the CEE affiliates of multinational firms in Austria are complementary to Austrian firms with no adverse effects of affiliate wages on parent company's employment (Marin 2004); but Bellak and Altzinger (2001) find a negative effect of

affiliate sales on parent employment, as opposed to Marin (2004), who find no effect. Simulation results about the effects of Eastern enlargement or trade with the CEECs point at a slight shift in functional income distribution at the expense of wage earners (Breuss and Schebeck 1999); a negative effect of both final goods trade and outsourcing to Eastern Europe on unskilled labor; a negative effect of final goods trade on the skilled wage rate in the import competing sector, but a positive effect of outsourcing on skilled wage rates in all sectors (Kratena 2006). Finally there is also a different finding indicating a decline in the relative wage of skilled to unskilled labor in Keuschnigg and Kohler (2002).

Executive Summary

This study reviews the literature on the effects of globalization on labor market outcomes and income distribution between labor and capital and within labor –across sectors and between high-skilled and less-skilled labor- in the developed countries, and in particular the old member states of the EU and specifically Austria. Two aspects of globalization are analyzed: international trade and foreign direct investment (FDI). International outsourcing effects will also be reviewed in this context.

The concerns regarding the links between globalization and labor market outcomes have been analyzed within three broad lines of approaches: 1. Trade theory, 2. Labor economics, 3. Political economy.

Based on Heckscher-Ohlin and Stolper-Samuelson theorems, traditional trade theory indicates that in a capital and skilled labor abundant developed country the wages and employment of unskilled labor or certain groups of labor specialized in import-competing industries may fall in spite of aggregate welfare gains. Although the original Stolper-Samuelson model focuses on trade-induced redistribution from labor to capital, the trade theoretical debate in the recent decades has shifted towards within labor distributional impacts. Regarding the existence of an inevitable loser of openness in the traditional trade models, the new trade theory argues that the losses might be avoided due to significant additional efficiency gains of trade with increasing returns to scale, technology spillovers, increased competition, and product variation (Helpman and Krugman, 1985).

Labor economics approaches based on factor content analysis evaluate the effects of trade with regards to shifting labor demand in response to exports, which is a source of demand, and imports, which is a reduction in demand (e.g. Katz and Murphy, 1992; Borjas et al, 1992; Wood, 1994). Thus exports increase employment, whereas imports decrease. Moreover from a microeconomic and institutional perspective trade not only shifts the demand schedules, but also affects the bargaining process i) via decreased rents due to higher international competition, ii) via trade induced technological change, which creates negative efficiency and labor disciplining effects (e.g. Greenaway et al., 1999a&b). The decline in unionization in the recent decades also intermingles with the trade effects and the increase in inequality (e.g. Freeman, 1998).

The political economy literature starts out with a similar argument to institutional labor economics approaches, but additionally emphasizes that the particular interaction of neoliberal policies and globalization in this era leads to a deterioration in the bargaining power of labor in both developing and developed countries (e.g. Rodrik 1997, Crotty et al. 1998, Epstein 2000). This literature points at on the one hand increased competitive pressures on firms due to trade openness, which make employers less accommodative and more aggressive during the bargaining process, and on the other hand the threat effects associated with international trade, outsourcing, and investment flows due to the asymmetry between the fall back options of capital vs. labor. These negative bargaining effects intermingle with the demand side factors created by tight fiscal and monetary policies as well as the decline in aggregate wage income, which leads to a vicious circle of aggregate demand deficiency and low employment.

In the empirical literature, there is some evidence that trade - inter-industry trade with low wage countries as well as intra-industry-trade with developed countries- lead to

job and income losses for workers in import competing industries and in particular for the less skilled labor (e.g. Revenga, 1992; Sachs and Shatz, 1994; Greenaway, 1999a; Landesmann et al., 2001). There are, however, important differences in the estimated magnitudes of these effects. There are also differences in the responsiveness of employment vs. wages across countries: the typical argument is that different from US, in Europe employment, rather than wages carry the burden of adjustment. Based on this argument, a link is built to the debate about the relatively strong labor market institutions in Europe. The time dimension of the adverse effects is also not clear: the optimistic approach expects that they will gradually disappear as the welfare gains of trade lead to upgrading in the economy (Bhagwati et al, 2004; OECD, 2005). Adding another dimension to the controversies, the studies that focus on the effects of trade flows to explain adverse labor market effects are criticized by trade-theoreticians, who argue that the observed changes in import prices and volumes have not been sufficient to explain the large changes in relative wages, and technological change is the main reason for the decline in the relative wage of the unskilled workers (e.g. Lawrence and Slaughter, 1993). More recently the rising importance of imports of intermediate inputs (international outsourcing) has generated some consensus that both intermediate goods trade with low wage countries and technology lead to deterioration in the labor market outcomes for less skilled labor (e.g. Feenstra and Hanson, 1999). It is also emphasized that import penetration may stimulate defensive innovation; thus trade may have an indirect effect on wages (e.g. Stehrer, 2004; Greenaway et al., 1999b). Recently, the controversy within trade theory has gained a new dimension with the contribution of Samuelson (2004), who argues that if the countries start from a situation of initial trade rather than autarky, an increase in the productivity of the less developing country in the export industry of the developed country leads to a reduction in terms of trade at the expense of the developed country. The case behind the debate is the technological catching-up of China, which may result in an adverse shift in terms of trade against the US and a permanent reduction in the US per capita real income, even as world income increases.

There is also no consensus on whether the deterioration in the labor market outcomes for the less skilled workers are accompanied by a general deterioration in labor's bargaining position in developed countries. While some authors from both labor economics and trade theory approaches argue that there is not a general downward pressure on the average wage level, but only a rise in wage inequality (Krugman, 1995; Lawrence and Slaughter, 1993; Revenga 1992; Sachs and Shatz 1994; Feenstra and Hanson, 1996), the labor disciplining effects mentioned in both labor economics approaches (e.g. Freeman, 1998; Greenaway et al., 1999a&b; Slaughter, 2001) and the political economy literature (e.g. Rodrik, 1997; Epstein, 2000) indicate that it is worth looking at the link between globalization and the bargaining power of labor. This is particularly important given the general declining trend in labor's share in many developed countries, which is not addressed in most of the trade literature. Also an increasing number of studies emphasize that labor disciplining and threat effects of globalization may not be directly reflected in the actual volumes of trade and capital flows, and call for direct qualitative evidence on these effects.

With respect to Austria, the empirical results on the labor market effects of globalization can be summarized as follows (See also Table 1): Regarding the effects of trade (total -final and intermediate) on total employment (or unemployment) either no or small impact of imports are found (Aiginger et al., 1996; Winter-Ebmer and Zimmermann, 1998; Hofer and Huber 2003); but a negative effect exists for blue-

collar workers, the elderly, and low income workers (Aiginger et al. 1996; Hofer and Huber, 2003), or in low wage industries and in industries with a higher share of foreign workers (Winter-Ebmer and Zimmermann, 1998). There is a minor or insignificant impact of exports on employment (Aiginger et al. 1996; Winter-Ebmer and Zimmermann 1998, Hofer and Huber 2003). Regarding wages there is evidence of a negative effect of imports and a small positive effect of exports from and to the East based on individual data (Aiginger et al. 1996), and no effect of imports from the East and a positive effect of exports to the rest of the World at a sectoral level (Winter-Ebmer and Zimmermann, 1998). There is less negative import effect, and more gain from export for mobile workers (Aiginger et al. 1996). There is no effect on white collar wages, but a positive export and negative import effect on blue-collar wages (Hofer and Huber, 2003). Regarding the relative employment of high-skilled to low-skilled labor a positive effect of exports, a negative effect of imports (other than outsourcing to the East) is found (Egger and Egger 2003). Outsourcing to the CEECs lead to an increase in the relative employment and wages of high-skilled to low-skilled labor (Egger and Egger 2003; Egger et al. 2001), but there is also a controversial finding showing a negative effect of total outsourcing on relative employment and wages of the skilled, which also indicates that Austria is a human capital scarce country (Lorentowicz et al. 2005; Marin, 2004). There is some evidence that the CEE affiliates of multinational firms in Austria are complementary to Austrian firms (Marin 2004) with no adverse effects of affiliate wages on parent company's employment; but Bellak and Altzinger (2001) find a negative effect of affiliate sales on parent employment, as opposed to Marin (2004), who find no effect. . Simulation results about the effects of Eastern enlargement or trade with the CEECs point at a slight shift in functional income distribution at the expense of wage earners for the benefit of employers (Breuss and Schebeck 1999); a negative effect of both final goods trade and outsourcing to Eastern Europe on unskilled labor; a negative effect of final goods trade on the skilled wage rate in the import competing sector, but a positive effect of outsourcing on skilled wage rates in all sectors (Kratena 2006). Finally there is also a different finding indicating a decline in the relative wage of skilled to unskilled labor in Keuschnigg and Kohler (2002).

Overall in the empirical literature about Europe as well as the US, there is some evidence that trade has adverse effects on labor market outcomes in import competing industries and in particular for the less skilled labor either through direct effects or trade induced technology effects. Independent of the important differences in theoretical approaches, a common point is that unskilled labor is more fragile with respect to these effects than skilled labor. However the controversy remains whether this difference is only a relative disadvantage with respect to skilled labor or an absolute disadvantage. Also it is an empirical question, whether skilled labor's wage or employment gains suffices to improve their share in value added, or whether income distribution between skilled labor and capital is deteriorating due to productivity gains. Finally the changes in both skilled and unskilled labor's share determine the outcome regarding the functional income distribution between labor and capital. In the case of European countries, since the adjustment is mostly in terms of employment, an analysis of income distribution requires estimates of both wage and employment effects. The combination of wage, employment and productivity developments determine eventually the share of wages (wage bill) in value added in a sector. So a full analysis of the distributional impacts of globalization has many dimensions: developments in wages and employment, and the share of wages in value added for unskilled and skilled labor as well as at an aggregate level.

Another important finding in the literature is that the negative trade effect stems from not only inter-industry trade with low wage countries but also intra-industry-trade with developed countries. But research results point at significant heterogeneity in that respect, and show that the composition and origin of imports do matter. Another level of heterogeneity is that the effects vary across sectors. To address these issues, it is important to distinguish intermediate vs. final goods imports, the origins of imports (low-wage vs. high-wage as well as catching up vs. other developing countries and developed countries), and different sector groups (high, medium, low skilled).

The effects of capital flows are analyzed mostly in firm level studies, but an estimation of the effects of FDI outflow on wages and employment at a sectoral level is a relevant extension to the studies on trade and outsourcing effects. This is also a way of testing the threat effects, in case they are reflected by the volume of flows.

Finally, if trade or capital mobility affects the elasticity of labor demand and the bargaining power of labor, this then not only leads to a shift in the labor demand or wage bargaining curve, but also changes the responsiveness of employment to production and wages, and wages to productivity and unemployment. Many studies conclude that the effects of openness on labor market outcomes are beyond what the volumes indicate, and are related to a general shift in the terms of bargaining and labor demand in an era of intense competition and high capital mobility. Thus it is not openness per se, but the conditions under which it takes place –i.e. the shift of balance of power relations implied by openness- is what may be hurting labor. Then the policy debate must also focus in this area.

The policy debate regarding the effects of globalization on labor market outcomes can be summarized as a spectrum with two opposite ends reflecting the differences in the theoretical approaches: On the one end, the mainstream emphasis is heavily on the need for further labor market deregulation, and methods to increase the wage flexibility and mobility of the unskilled workers (e.g. OECD, 2005). On the other end take place political economy approaches emphasizing the role of industrial policy to enhance the investment and job creation potential of the economies, and international macroeconomic policy coordination and labor cooperation to prevent the destructive competition among workers in different countries.

A full account of the channels through which trade and capital flows affect labor will also be important to determine the correct policy tools. If the current form of globalization is leading to labor disciplining effects or decreasing the employment creation capacity for a given level of output, then opting for further flexibilization in labor market intensifies the problem rather than solving it. The mainstream emphasis on the increased flexibility for the unskilled labor seems to be implicitly meaning an acceptance of dramatic wage declines for this group of labor, without considering the social consequences as well as the massive shift of income distribution between labor and capital. If globalization has significant effects on wages, be it skilled/or unskilled wages, a social consensus oriented policy requires an evaluation of the shifts in the bargaining power of labor and capital.

1 Introduction

This study reviews the literature on the effects of globalization on labor market outcomes and income distribution between labor and capital and within labor –across sectors and between high-skilled and less-skilled labor. The emphasis will be on the developed countries, and in particular the old member states of the EU and specifically Austria. Since the adjustments in income distribution work through effects on wages as well as employment, the literature on both effects will be reviewed.

The review of the literature focuses on two aspects of globalization: international trade and foreign direct investment (FDI). International outsourcing effects will also be reviewed in this context. Since international labor mobility is much more limited than the mobility of both goods/services and capital, the immigration aspect of globalization is not covered in this review. Nevertheless this is not to say that the effects or the debate itself are not relevant, however this should be the topic of another study.

The volume of world trade has grown 16 fold over the second half of the twentieth century, annual outflows of FDI were 25 times higher at the end of the 1990s than in 1950 (OECD, 2005). In particular since 1970, in many OECD countries trade volume as a ratio to GDP has more than doubled. Technological progress, which facilitates fragmentation of production, and liberalization of capital flows have added a new dimension to the degree of globalization by increasing the amount of off-shoring (to affiliates in foreign countries) or international outsourcing (to a foreign non-affiliate firm) of certain fragments of production. There is an expanding anxiety that globalization leads to job losses and downward pressure on wages in the developed high-wage countries. The outsourcing of white-collar jobs in information technology sector has also recently made it clear that the effects will not only be limited to manufacturing industry. The integration of the Central and Eastern European Countries (CEECs) to the European economic area has intensified the debate especially in the old Europe, particularly in the more integrated countries like Germany and Austria. Furthermore integration of even lower wage countries like India and China with large populations is creating additional considerations via further widening of the international differences in labor costs.

The distribution and labor market effects of globalization and popular discontent have attracted a wide variety of research as well as the attention of the international institutions like the IMF, World Bank, UN, European Commission, OECD, and ILO. The Employment Outlook of OECD in 2005 focused on trade adjustment costs in the labor markets. ILO has established the World Commission on the Social Dimension of Globalization (2004) and published the report on “A fair globalization: Creating opportunities for all”.

The concerns regarding the links between globalization and labor market outcomes have been analyzed within three broad lines of approaches: 1. Trade theory, 2. Labor economics, 3. Political economy.

Based on Heckscher-Ohlin and Stolper-Samuelson theorems, traditional trade theory indicates that in a capital and skilled labor abundant developed country the wages and employment of unskilled labor or certain groups of labor specialized in import-competing industries may fall in spite of aggregate welfare gains. Although the original Stolper-Samuelson model focuses on trade-induced redistribution from labor

to capital, the trade theoretical debate in the recent decades has shifted towards within labor distributional impacts. Regarding the existence of an inevitable loser of openness in the traditional trade models, the new trade theory argues that the losses might be avoided due to significant additional efficiency gains of trade with increasing returns to scale, technology spillovers, increased competition, and product variation (Helpman and Krugman, 1985).

Labor economics approaches based on factor content analysis evaluate the effects of trade with regards to shifting labor demand in response to exports, which is a source of demand, and imports, which is a reduction in demand (e.g. Katz and Murphy, 1992; Borjas et al, 1992; Wood, 1994). Thus exports increase employment, whereas imports decrease. Moreover from a microeconomic and institutional perspective trade not only shifts the demand schedules, but also affects the bargaining process i) via decreased rents due to higher international competition, ii) via trade induced technological change, which creates negative efficiency and labor disciplining effects (e.g. Greenaway et al., 1999a&b). The decline in unionization in the recent decades also intermingles with the trade effects and the increase in inequality (e.g. Freeman, 1998).

The political economy literature starts out with a similar argument to institutional labor economics approaches, but additionally emphasizes that the particular interaction of neoliberal policies and globalization in this era leads to a deterioration in the bargaining power of labor in both developing and developed countries (e.g. Rodrik 1997, Crotty et al. 1998, Epstein 2000). This literature points at on the one hand increased competitive pressures on firms due to trade openness, which make employers less accommodative and more aggressive during the bargaining process, and on the other hand the threat effects associated with international trade, outsourcing, and investment flows due to the asymmetry between the fall back options of capital vs. labor. These negative bargaining effects intermingle with the demand side factors created by tight fiscal and monetary policies as well as the decline in aggregate wage income, which leads to a vicious circle of aggregate demand deficiency and low employment.

The rest of the study is organized as follows: Section 2 reviews the conceptual framework, section 3 summarizes the results of the empirical studies for the US and Europe. Section 4 presents the literature on the trade and capital flow effects on labor market outcomes in Austria. Section 5 summarizes the various positions in the policy debate. Section 6 summarizes some main findings, and concludes by pointing at the implications for future research.

2 *Conceptual framework*

This section is structured as follows: Section 2.1 reviews traditional trade theory and the critique within the trade theory; then the new discussions against the background of outsourcing and FDI are summarized. Section 2.2 reviews the labor market approaches based on the factor content analysis and institutional and micro approaches. Section 3 presents a summary of the political economy literature.

2.1 *Trade theory*

The traditional trade theory based on both Ricardian models, which emphasize relative technology differences across countries, or Heckscher-Ohlin models, which emphasize international differences in factor intensities, expect aggregate income gains after trade liberalization, which leads to a specialization of production according to comparative advantages. In the Heckscher-Ohlin framework trade between the relatively capital abundant developed countries and the labor abundant developing countries leads to a specialization of the former in capital intensive industries. In Ricardian models based on productivity differentials across economies and branches, trade liberalization leads both the developed and the developing countries to specialize in the sectors where they have the highest productivity gap, and thereby the developed country specializes in higher productivity sectors, and if skill is the source of productivity differentials, the demand for higher skilled workers utilized in these sectors increase, whereas the opposite occurs in the developing country. This result is analogous to the Heckscher-Ohlin framework.

Going beyond the aggregate results, traditional trade theory also indicates that there may be losers in a country in spite of aggregate income gains. In particular in the capital abundant developed countries, real wages may fall as the country specializes in its comparative advantage. The joint outcome of Heckscher-Ohlin and Stolper-Samuelson theorems is a positive effect of openness on the returns to capital due to the increased capital intensity of production in countries with a comparative advantage in capital intensive industries¹. Stolper-Samuelson theorem expects factor prices to equalize through trade openness across the countries.

In models with differentiated labor input, the effects of openness may also differ for skilled vs. unskilled labor. Interestingly, the debate in the recent decades has shifted from redistribution between capital and labor towards within labor distributional impacts, although the original Stolper-Samuelson model focuses on labor and capital as the two factors of production. On the one hand this is an outcome of a very early debate following Leontief's paradox about the test of the classical Heckscher-Ohlin theory, which had indicated that the US exports were rather labor intensive although the country was the most capital abundant country. Consequently Ricardian models with technological differences determining comparative advantage seem to offer a more general explanatory power. Along those lines, US has its comparative advantage in high skilled labor rather than physical capital. Nevertheless, it is still interesting that the debate on the distributional outcomes of trade is completely neglecting the

¹ The expectations about the changes in relative factor prices are based on an expected increase in the prices of the exportables after trade liberalization (an increase in the export and import intensity of production), and thereby reallocation of production, and an increase in the rewards (in nominal as well as real terms) to the relatively abundant factor used more intensively by the exporting sectors.

distribution between labor and capital. In the extension of the original model, in a relatively high skilled labor abundant developed country, real wages of low skilled workers may fall. Similarly, the real wages of certain groups of labor specialized in import-competing industries may fall, if the mobility of labor across the sectors is limited due to skill differences, asymmetric information, geographic mismatch or poor job search skills. It is also argued that the positive effects for skilled labor need not materialize in the short run, if capital is sector-specific and immobile, which prevents the optimal reallocation of production across sectors. This may result in a decline in the real wages of the skilled workers in the exportable sectors as well due to falling marginal product of skilled labor with increased employment and fixed capital. Nevertheless, once the transition period is over, the factors that are relatively abundant in the country are supposed to gain. Thus, in a country with relatively abundant skilled labor, the wage of the unskilled workers will decrease as a result of openness, and that of the skilled workers will increase in the long run. However, in the traditional models a full accounting of the costs and benefits of trade liberalization in the long run, after incorporating the adjustment costs of the short-run, is not discussed (Greenaway and Nelson, 2001).

2.1.1 Alternative approaches in trade theory

The dynamic formulations of Ricardian models point at different results regarding the skilled labor in the developing countries (Landesmann et al., 2001): In these models, trade leads to productivity catching-up (or falling behind). With catching up, the cut-off point of specialization between the developed and the developing economy changes. Both countries move towards higher productivity sectors, and the developing country captures some industries of the developed country, which are for its standards low productivity sectors. The implications for the relative labor demand for higher skilled labor compared to the Heckscher-Ohlin framework is the same for the developed country, but different for the developing country, where the relative demand for skilled labor also increases. The more recent discussions on the labor market effects of outsourcing also develop around this aspect, which will be discussed in Section 2.1.2 in more detail.

As opposed to the catching-up models, endogenous growth theory point at pessimistic results for the developing countries (e.g. Grossman and Helpman, 1991; see Barry and Walsh, 2005 for a review). Free trade limits the developing economy to less dynamic sectors; learning by doing, human capital accumulation and R&D expenditures declines in the developing country, and consequently output and productivity growth rates may also decline. These models expect divergence rather than convergence of growth rates across countries.

The optimistic critique comes from the new trade theory, which emphasizes the increasing importance of intra-industry trade across similar countries as a challenge to the traditional trade theory whose scope is limited to inter-industry trade (Helpman and Krugman, 1985) The existence of imperfect competition, additional efficiency gains of trade due to increasing returns to scale, technology spillovers, increased competition, and product variation also raises questions about the assumptions of the traditional trade theory (Helpman and Krugman, 1985). Under these conditions it is not necessary that one factor loses in each country.

2.1.2 Trade theory, FDI and outsourcing

In one of the most cited early contributions regarding international outsourcing, Feenstra and Hanson (1996) emphasize that fragmentation and reallocation of production to low wage countries has given a completely new dimension to the effects of globalization. International outsourcing has particularly changed the composition of imports, increasing the imported intermediate inputs by domestic firms. They argue that the composition of imports (share of intermediate imports) rather than its volume is what matters. If firms respond to import competition from low wage countries by moving non-skill intensive activities abroad, then trade will shift employment toward skilled workers within industries. While most previous studies on the effects of trade presume that import competition shifts resources across industries without changing their composition, Feenstra and Hanson emphasize the relevance of structural adjustment occurring within industries. Although in the recent years it was argued that there is an increase in intra-industry trade which is assumed to be neutral with respect to factor prices, with outsourcing there is an increase in the factor content of traded goods within the same industry with a vertical specialization in different segments, which leads to same effects as inter-industry trade. The empirical motivation of Feenstra and Hanson has been the increase in FDI and outsourcing from the US to the maquiladoras at the Mexican border following NAFTA. In their theoretical model², south is originally producing and exporting a range of inputs up to some critical ratio of skilled to unskilled labor, and the North the remainder of the inputs. With increased outsourcing and/or growth of capital stock in the South due to capital inflow from the North, this critical point is changing such that North is producing fragments, which include even more skilled activities as R&D and marketing. The activities transferred from the North to the South will be more skilled-labor intensive than those formerly produced in the South, but less skilled-labor intensive than those now produced in the North. The authors are showing that the relative demand for skilled labor and consequently relative wage of the skilled increase in both countries³. Outsourcing acts as endogenous technical change biased in favor of skilled labor. But they also argue that the relative changes do not need to correspond to absolute real wage decreases for unskilled labor in both countries, if the increase in the Southern supply lowers the prices of goods large enough to offset the wage reduction. Nevertheless the empirical validity of this assumption is debatable, and the adverse labor demand effects are amplified by other effects like technology and bargaining power effects, which will be discussed below.

Although most of the theoretical outsourcing literature is focused on relative wages or employment of skilled vs. unskilled workers, the reward of capital relative to labor is also a controversial issue. Jones and Kierzkowski (2001) point at the inconclusive results of most studies regarding the effects of outsourcing, which is expected to

² Their theoretical model is a single good, 3-factor (skilled and unskilled workers and capital), 2-country (North abundant in capital and skilled labor, and south in unskilled labor). Labor supply responds to wage changes. The model is very similar to the Heckscher-Ohlin model, but it is assumed that trade does not lead to factor price equalization.

³ Feenstra and Hanson (1996) names this development as the modified Stolper-Samuelson theorem, where the relative skilled wages in the developed country increases with respect to the developing country, although in both countries wages are changing in favour of skilled labor. Corresponding to the change in factor prices is an increase in the price index of the North relative to South, and the modified Stolper-Samuelson result is consistent with price changes.

generate a welfare improvement but unclear distributional effects, and they conclude: “almost anything can happen”. Kohler (2001) emphasizes the fixed cost element in a sector specific factors model, and distinguishes outsourcing with or without FDI. With FDI, outsourcing drives the domestic wage to the foreign level. Without FDI, the effect of outsourcing depends on the factor intensity ranking of the fragments. Domestic labor loses if a labor-intensive fragment is outsourced.

Kohler (2004) shows that net welfare increases from outsourcing are larger, when the cost savings effect due to the wage differentials between countries are larger, which he summarizes as: “the higher the gain, the lower the pain”. He points out that this is different from the distributional effects of trade openness, where “the higher the gain, the higher the pain”. He argues that outsourcing creates a macroeconomic surplus. The outcome of final goods trade liberalization is a price decrease, whereas outsourcing works in a similar direction to technological change. Kratena (2006) develops a model in similar lines to Kohler (2004) and shows the completely different distributional impacts of final goods trade and outsourcing. He also decomposes the general equilibrium impact of outsourcing on unskilled labor into a negative factor saving and a positive pure cost saving effect. The necessary decrease in the unskilled wage rate becomes smaller, when the cost savings effect becomes larger. In both final goods trade and outsourcing cases, the potential negative effect on unskilled labor is similar, and depends on the macroeconomic significance of the shock –the price shock in the case of final goods trade, or the proportion of the unskilled labor force used in the fragment that is sourced out in the case of outsourcing. But there are important differences with respect to the impact on sector specific labor and production patterns, which also translate into differences in factor adjustment costs. In the final goods trade the skilled wage rate and production declines in the import competing sector and rises in the other sector. If due to labor market institutions skilled wages are too high and downwardly rigid, final goods trade would lead to an increase in equilibrium unemployment. In the case of outsourcing skilled wage rates and production in both sectors rise, and thus downward rigidity of skilled wages is not a problem. This indicates a net welfare gain, and an additional Pareto advantage of outsourcing.

2.2 *Labor economics approaches to trade effects*

2.2.1 Factor content analysis

The approaches based on factor content analysis evaluate the effects of trade with regards to shifting labor demand in response to exports, which is a source of demand, and imports, which is a reduction in demand (e.g. Katz and Murphy, 1992; Borjas et al, 1992). This approach emerges from labor economics rather than trade theory⁴.

The predictions regarding the effect of trade on labor demand is as follows: exports increase employment, and imports decrease. In that respect the expectations from exports and imports are opposite, in a way different from the traditional trade theory’s emphasis on openness as a whole. Trade may also have effects on the relative demand for skilled vs. unskilled labor, since the exportables are high skill intensive and importables low skill intensive in a developed country. In this case the results are similar to the traditional trade theory. Wood (1994) also accounts for the presence of non-competing goods between northern and southern economies, which are not being

⁴ See Greenaway and Nelson, 2001 for a review.

produced anymore in the North, in the factor-content analysis, and he finds a larger implicit import of labor.

The factor content analysis measures the impact of trade by looking at the size of trade flows, which is a point criticized by trade theorists, who emphasize the use of relative price changes as a channel, which determine the labor market effects of trade.

2.2.2 Institutional and micro approaches

Standard trade theory assumes full employment of labor and capital. Micro labor economics approach point at the relevance labor market institutions and wage rigidities. If the job lost in the declining industries may not be gained by job gains in the other sectors, the country loses from trade liberalization. Imperfections in the product and labor markets play a role in these models. The existence of mark-ups give the possibility to labor to bargain for parts of this rent, and the bargaining power of different groups within labor depends on the institutions, organizational power, insider relations, skill barriers, asymmetric information etc. Trade not only shifts the demand schedules, but also affects the bargaining process via decreased rents due to higher international competition. In the meantime trade induced technological change creates negative efficiency and labor disciplining effects (Greenaway et al., 1999a&b). Furthermore by raising the wage elasticity of demand for labor imports or increased potential capital mobility indirectly reduce the bargaining power of labor (Rodrik, 1997; Slaughter, 2001).

The decline in unionization also accounts for the increase in inequality in the recent decades (e.g. Freeman, 1998). Since the deregulation of the labor market has been a parallel development to trade liberalization, this also contributes to the deterioration in unionization. Thus the decline in the union power and trade liberalization are on the one hand independent and on the other hand mutually reinforcing reasons of the decline in wages. Also if globalization affects the return to union membership, this may cause a further decline in the power of unions. If labor market deregulation leads to a change in the institutional structure or bargaining patterns, the results will also be non-neutral with respect to wages and employment of different groups of labor. It is argued that countries with large unionized sectors and central bargaining are characterized by lower wage inequality, lower unemployment, and higher growth, whereas decentralization and inequality in the strength of sectoral unions can result in inter-sectoral inequality, cost-push inflation, and lower employment and growth⁵. Gaston and Trefler (1995) develop a theoretical model of union-firm bargaining in an oligopolistic international market, and show that the often argued positive relationship between low tariffs and high wages is only specific to union sectors.

Again pointing at another explanation for the wage inequality, Matusz (1994) incorporates the Stolper-Samuelson logic to the efficiency wage models, and shows that trade liberalization in the low-wage sector leads to job losses.

2.3 Political economy

The political economy literature questions the heavy shift in the literature on labor market effects of trade towards the inequality between the skilled vs. unskilled workers (e.g. Epstein, 2000; Rodrik, 1997; Diwan, 2001; Harrison, 2002). The

⁵ See Gaston and Nelson, 2005 for a review.

excessive focus on the inequality within labor is missing another important aspect of distribution: between labor and capital. The shift in emphasis is in a way shifting also the focus on the source for increased inequality from high profits to high wages for skilled and/or organized labor⁶. However this may reduce the problem of distribution to the following simplistic question: “Are some workers’ wages low because some others are earning not too low?” The policy implication of this shift is a further emphasis on labor market flexibility to decrease inequality (see the review of OECD, 2005 in section 5). Political economists argue that the research has to focus equally on inequality between labor and capital, and the policy debate has to acknowledge the macroeconomic effects of distributional changes –i.e. the slow down in growth and investment, and thereby employment in spite of increased profits.

In the political economy approach the recent era of globalization is not treated as an isolated phenomenon, but rather part of a broader neoliberal policy shift, which is an indispensable part of the overall assessment of the effects of openness on labor. Since the 1980s, the world economy has been guided by economic policies that include the dismantling of government regulations in financial, goods and labor markets as well as openness to trade, foreign direct investment, and financial capital flows. The promise of these policies has been that liberalized markets will increase efficiency and growth, and provide fair distribution where all factors of production receive a return consistent with its productivity. Political economists emphasize that after two decades of extensive liberalization in both developed and developing countries, in many cases growth on average is lower, the within country distribution of income is both becoming more unequal and changing at the expense of labor, and the persistence of unemployment goes hand in hand with lower labor costs (Haque, 2004; Onaran, 2004; Griffin, 2003; Pollin, 2002; UNCTAD, 1997; Rodrik, 1997).

In the literature a number of factors are pointed out related to the particular interaction of neoliberal policies and globalization in this era to explain this race to the bottom for labor in both developing and developed countries (e.g. Rodrik 1997, Crotty et al. 1998, Burke and Epstein 2001; Onaran, 2004).

Below I summarize and classify these factors according to bargaining and demand side effects (See Figure 1 for a schematic summary):

- 1) Bargaining process and balance of power between labor and capital
 - a. the high and increasing power of international capital due to
 - i) the concentration of investment in a small number of multi national companies with headquarters in a few developed countries
 - ii) the importance of foreign investment to a large number of developing countries, who compete to attract capital due to lack of foreign aid and the unreliability of portfolio investments
 - b. consequently enhanced deregulation of the goods, labor, and capital markets, and less room to push for controls

⁶ In reference to the concepts of a hypothetical neoclassical perfectly competitive setting, unions have been named as “rent-sharing” institutions. This choice of wording for the process of union bargaining disregards the setting, where the decision making in the labor process is fundamentally asymmetrically organised regarding the power relations between the employer and the workers.

- c. deterioration in the institutional and organizational power of labor due to deregulation of the labor market
- d. labor disciplining effects of globalization
 - i) increased competitive pressures on firms due to trade openness, which make employers less accommodative and more aggressive during the bargaining process
 - ii) increased global substitutability of labor, particularly unskilled labor due to technological change as well as openness and capital mobility
 - iii) the asymmetry between the fall back options of capital vs. labor due to the increase in the global mobility of capital as opposed to the higher fixed costs of mobility for workers and significant legal barriers
 - iv) consequently the threat effects associated with international capital mobility and outsourcing

2) Demand side

- a. the consequent increase in the wage elasticity of labor demand
- b. contractionary pressures on national governments in maintaining social welfare systems, which decrease the social wage and lead to a decline in the bargaining power of labor; and tight fiscal and monetary policies, which decrease aggregate demand, and consequently the demand for labor
- c. lower wages adding to aggregate demand deficiency
- d. a vicious cycle of low growth, low employment, eroding the bargaining power of labor further

The part of the literature on bargaining process and threat effects emphasize that even when outsourcing or off-shoring does not include particular cost advantages (due to productivity differentials or costs of transportation), the firms may use the availability of an exit option to enhance their bargaining power relative to workers, and therefore reduce wages and/or employment, even in the absence of substantial capital flows (Crotty et al., 1998; Rodrik, 1997). The mere threat of moving a factory to a different location may have a significant impact on wages or institutional variables such as unionization rates. Thus the impact of openness may be larger than may be attributed to trade, FDI or outsourcing. Epstein (2000) calls this the “magnification effect” of openness.

Burke and Epstein (2001) discuss the case of countries bidding down wages (or taxes) to attract capital, and concludes that even when the firm does not leave and carry on a productive investment in the home country, the wages at home will still be bid down (unless the agglomeration effects are quite large), though less compared to the levels in the competing bidding countries. The theoretical models of threat effects are based on game theoretical bargaining between capital and labor. For example in Rodrik (1999) an increase in firms’ outside options reduces labor’s share, the alternative wage, employment, and may be national income. For this outcome an actual capital outflow is not required.⁷

⁷ Epstein (2000) presents a review of the bargaining models with two-way FDI flows between Northern countries (Zhao, 1995; 1998; Bughin and Vannini, 1994; Naylor and Santoni, 1999; Reddy and Dube,

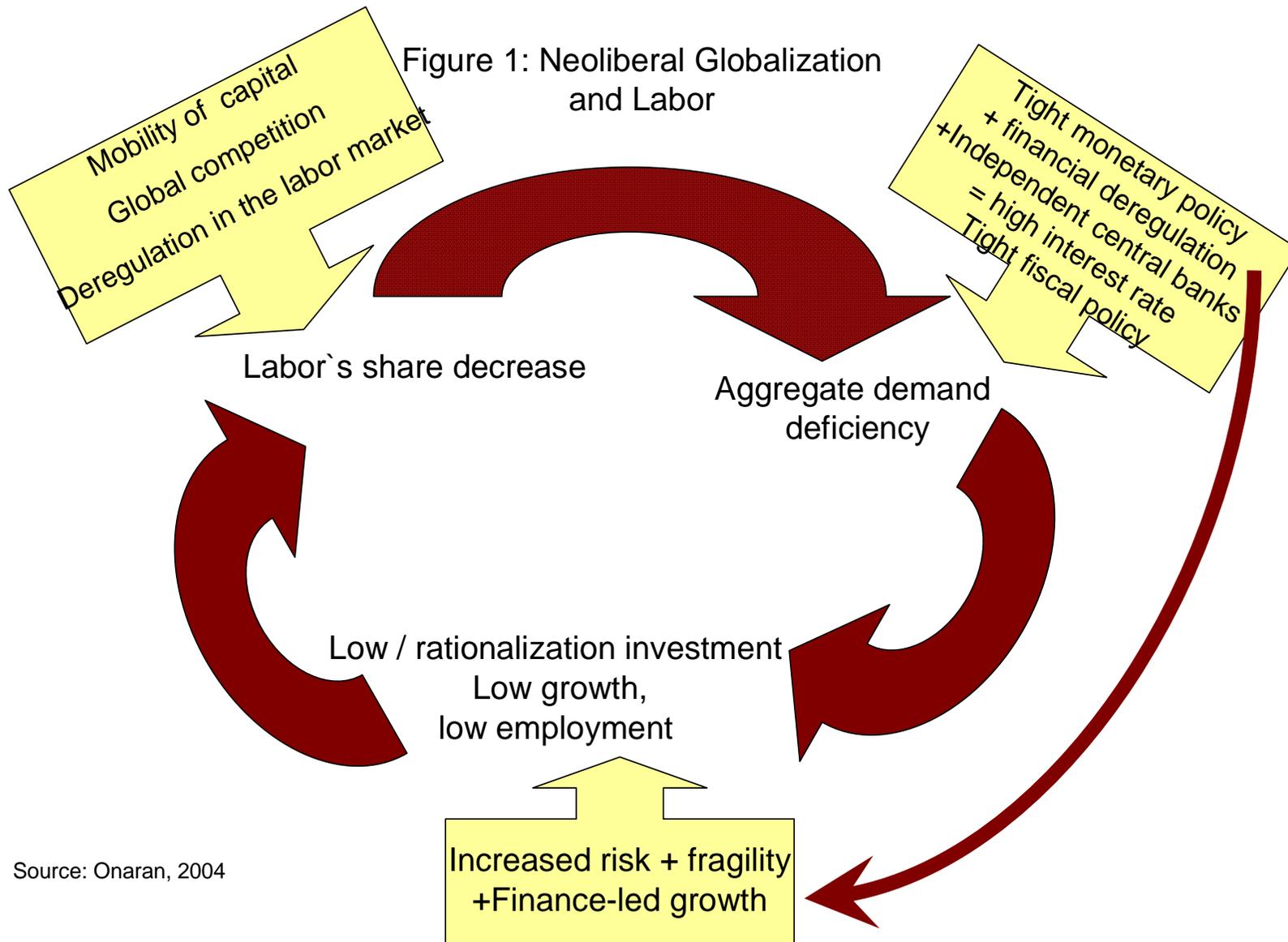
Sectoral differences regarding the effect of openness are also discussed within the political economy approach. Labor's bargaining power is expected to vary positively with capital intensity, and the use of skilled labor, and negatively with labor intensity, and the use of unskilled labor (Bohle and Greskovits, 2005). Collective action is easier in capital intensive industries, where a few large firms employ concentrated, high numbers of workers. At the same time, labor costs are relatively less important in capital intensive industries, and employers can be readier to accommodate demands for higher wages. Similarly, the more an industry relies on skilled labor, the likelier it is that firms will pay higher wages to increase their workers' loyalty. While highly skilled labor is a scarce resource, unskilled labor can easily be replaced. In capital intensive industries the threat effects is also expected to be more moderate, since capital mobility is expected to be more costly in these sectors (Burke and Epstein, 2001).

The labor disciplining effects and the deterioration in the institutional power of labor mentioned in the political economy literature are common points, which are emphasized also in the labor economics approaches. In face of the negative effects of openness on wages and employment, including trade among the developed countries, an increasing number of studies emphasize trade induced labor disciplining as well as threat effects and institutional change (e.g. Freeman, 1998; Greenaway et al., 1999a&b, Slaughter, 2001).

However, the demand side effects mentioned above are mostly overlooked by economists outside the political economy approach. Particularly Post-Keynesians emphasize the demand deficiency as a major conflict of the era of neoliberal globalization, which is marked by pro-capital redistribution policies, based on low wages, weak unions, mobile capital, high interest rates, and restrictive fiscal policy. The shift in the relative importance of domestic vs. International markets increases the relative importance of wages as a cost item rather than as a source of demand for the individual firm; however, it leads to chronically insufficient aggregate demand and chronic excess aggregate supply. Although in individual countries there can be cases where high profits generate high investment and growth, the global economy is wage-led in the aggregate sense; thus a global decline in the wage share is leading to a global demand problem (Blecker, 2002). This is resulting in a decline in the level of investment and/or a change in its character towards labor saving rather than capacity expanding investment. The firms go on over-investing in cutting edge technology, moving across the borders to areas of cheap labor, smashing unions, cutting wages, pushing for tax cuts to survive through competition (Crotty and Dymski, 2000; Crotty, 2000). This destructive competition is further aggravating demand deficiencies. As production becomes more sophisticated to meet the diversified demands of the international global elite, competition is becoming fiercer in order to take more share of the insufficient global demand (Went, 2000).

2000 with endogenous unionization and threat effects, cited in Epstein, 2000). These models show that two-way FDI, by increasing firms' outside options reduces wages both in the unionized and, under some conditions, in the non-unionized sector.

Figure 1: Neoliberal Globalization and Labor



Source: Onaran, 2004

3 Empirical literature on the US and Europe

This section is organized as follows: First the empirical findings for US and Europe about the effects of trade on relative employment and wages are discussed based on both trade theoretical and labor economics approaches (Sections 3.1.1 and 3.1.2). Then the empirical findings regarding the outsourcing and FDI effects are discussed with a particular emphasis on the debate on the effects of eastern enlargement for the EU (Section 3.2). Finally the empirical political economy literature on the changes in the labor's share in income is reviewed.

3.1 Effects of trade on sectoral or relative employment and wages

3.1.1 US: evidence and methodological debates

The discussion on trade effects in the last one and a half decade is dominated on whether rising trade with low wage countries has been an important factor in the job losses in certain industries as well as rising inequality in the wage share of skilled vs. unskilled labor in the US. Landesmann et al. (2001) report that the increase in import penetration took off much earlier in the US than in Europe; therefore it is no surprise that much of the initial research focused on the US. In the US the wages of the low skilled workers have not only declined dramatically during the 1980s and 1990s, but also decreased in absolute terms (Feenstra and Hanson, 1996, 1999). The interaction between the effects of skill-biased technical change and trade with low wage countries, and more recently international outsourcing have been explored to account for this change.

Most researchers have concluded some negative effect of trade on both aggregate employment and wages, and inequality between skilled vs. unskilled labor, but the magnitudes change and differ across sectors.⁸ Based on factor content analysis for the US, Sachs and Shatz (1994) find that trade had a significant but small effect on the skill premium and job losses for the unskilled⁹. Borjas et al (1992) find some negative trade effect for high school dropouts. Revenga (1992) finds that the decline in import prices causes a decline in employment and wages in the trade impacted industries.¹⁰

On the other hand, the trade-theoretical critique of these studies, which focus on trade as an explanation for skill premium, have argued that one has to build the link through relative price changes, however the observed changes in import prices and volumes, or relative changes in the price of skill-intensive vs. unskilled-intensive products have not been sufficient to explain the large changes in relative wages, or they are inconsistent with the expectations of Stolper-Samuelson theorem (e.g. Krugman, 1995; Lawrence and Slaughter, 1993). Lawrence and Slaughter (1993) argue that technological change is the main reason for decline in the relative wage of the

⁸ See Greenaway and Nelson, 2001 for a review.

⁹ They show that increasing import shares resulted in 7% job-loss among manufacturing workers and 2% among non-manufacturing workers. They estimate that 40% of the difference in employment growth during 1950-78 and employment decline during 1978-90 can be attributed to trade.

¹⁰ Based on reduced form regression method, the effect of import prices (interacted with import share) on employment, average weekly hours and wages of production workers in the US over the period of 1977-1987 for a panel of manufacturing industries is estimated. It is found that a 10% reduction in import prices is associated with 2.5% to 4% decline in employment and 0.5% to 1% in wages in the trade impacted industries.

unskilled workers¹¹. Many factors may intervene with the link from trade to factor prices, and the absence of this part of the link is often seen as a crucial element against the arguments, which explain the deterioration in the labor market outcomes of unskilled workers by trade.

Along similar lines, Bhagwati and Dehejia (1994) argue that removing the unrealistic assumptions of the Stolper-Samuelson theorem can lead to conditions, which do not lead to an inevitable deterioration in the position of unskilled workers –e.g. scale economies, product diversification, increased competition, technical progress. Within their defense of free trade and account of the relative wage changes, there is also a point in parallel to the political economy critique of globalization: they argue that technological progress has made the capital “footloose”, which is important in explaining relative wage changes. Among the more recent contributions, Baldwin and Cain (2000) argue that technological change appears a more likely cause of the rising skill premium than trade¹².

However, the methodological issues related to the hardness of separating trade and technology effects continue to be discussed. Import penetration, particularly from the developing countries towards the high-skilled industries, may stimulate defensive innovation; thus trade induces relatively stronger skill-biased technical progress in the skill-intensive sectors, which leads to a sector bias of skill-biased technical progress, and therefore trade may be an indirect reason for the widening of the wage differential between skilled and unskilled workers in the advanced countries (Stehrer, 2004).

Recently, the controversy within trade theory has gained a new dimension with the recent contribution of Samuelson (2004), who argues that if the countries start from a situation of initial trade rather than autarky, an increase in the productivity of the less developed country relative to the export industry of the developed country leads to a reduction in terms of trade at the expense of the developed country. The case behind the debate is the technological catching-up of China, which may result in an adverse shift in terms of trade against the US and a permanent reduction in the US per capita real income, even as world income increases.

Finally, the role of domestic factors can not be downplayed in this discussion¹³. Freeman and Katz (1991) argue that domestic factors are the most important factors regarding job losses. In a study on the importance of institutional factors, Fortin and Lemieux (1997) find that about one-third of the growth of inequality in the 1980s in the US can be attributed to changes in institutional variables that affect the bargaining process like the real value of the minimum wage, the unionization rate, and economic deregulation.

¹¹ However, then Leamer (1996) also disaggregates the technology and trade effect, and points at a close relationship between trade and prices of labor intensive goods.

¹² They use the mandated wage methodology to estimate the link between the proportional change in commodity prices and factor prices. This method has received particular attention in the empirical studies on outsourcing effects.

¹³ Even at the aggregate level there is significant controversy about the relation between trade, productivity, and welfare gains. While there are cross-country econometric studies, which claim that more open economies grow faster than less open ones (e.g. Dollar, 1992; Sachs and Warner, 1995), they are challenged regarding methodological issues, and counter-evidence, which show that there is no clear link between trade policy and growth, and emphasize the importance of institutional conditions and industrial policy (e.g. Rodrik and Rodriguez, 2001).

3.1.2 Europe and other OECD countries

The research results for other OECD countries point at similar directions, but the debate focuses on possible differences in the adjustment at the quantity (employment) vs. price (wage) side of the labor market. Krugman (1995) based on a computational general equilibrium model argues that the shift of labor demand away from less skilled workers has been primarily reflected in falling relative wages in the United States and falling relative employment in Continental European countries. He argues that this difference is due to greater wage rigidity in the European countries. Freeman and Revenga (1999) for a panel of 18 OECD countries and detailed manufacturing industries for the period of 1978-1992 finds a significant negative effect of the change of import penetration on the change in both employment and wages, with bigger estimated impacts in Canada/United States than in European countries.

Regarding the employment effects most of the studies find a negative effect of increasing import competition on employment in manufacturing industries, but the estimated elasticities tend to be quite small and vary considerably across studies, depending on methodology (OECD, 2005; Dewatripont et al., 1999). One of the largest employment impacts of trade in the literature are found by Wood (1994), who argues that around 20% of the decline in the demand for the unskilled relative to skilled workers in the developed countries during 1960-90 is attributable to trade, and most of it has taken place in the 1980s. Contrarily, Kucera and Milberg (2002) show that net job losses from North-South trade results from export declines to the less developed countries, especially during the debt crisis of the 1980s, rather than from an increase in import penetration¹⁴.

Greenaway et al. (1999a) find that both export and import intensity of the economy cause reductions in employment in the UK¹⁵, but the source of the negative effect of import penetration is the imports from US and EU, and not East Asia and Japan. They conclude that the direct effects of trade are limited but the effects through trade induced productivity changes (defensive innovation) are strong, and particularly significant for competition among similar countries. These results are contrary to those of Wood (1994). Greenaway et al. argue that this may be the case because imports from Asia are in industries, which have already declined in the UK. Greenaway et al. (1999b) find a negative effect of both export and import intensity on wages, which they interpret as labor disciplining effects. These results are consistent with those of Konings and Vandenbussche (1995) for manufacturing industry wages in the UK.¹⁶ As with employment, negative effects of trade with EU are more pronounced¹⁷. The authors conclude that the expected positive effects of modern intra-industry trade theory are not realized. But they do not distinguish among sectors

¹⁴ The study is based on factor content analysis for 10 OECD countries during 1978-1995.

¹⁵ Based on reduced form regression results, they find that for a panel of manufacturing industry, import penetration explains in the short-run 5.8% and in the longer-run 6.4% of the total decline in employment of 24.8% over the period of 1981-91.

¹⁶ However the negative effect in Konings and Vandenbussche (1995) are limited to manufacturing, and they find a positive effect for the full sample of sectors. Their study is based on a firm level panel data.

¹⁷ The timing of the effect is also different across countries: imports from the EU and the US have the largest effect contemporaneously, whereas the impact of imports from Japan and East Asia is comparatively slower and lower.

with respect to their skill intensity. Intra-industry trade with EU and inter-industry trade with East Asia could restrain the wages of different groups of workers, with Asian trade adversely affecting the low skilled workers.

Landesmann et al. (2001) estimate the effects of trade on employment and wage growth in high and low skill industry groups separately for seven OECD countries¹⁸. The stylized facts suggest an increasing presence of some developing countries in higher-skill industries¹⁹. The authors argue that this pattern of trade integration proceeds quite differently from what a Heckscher-Ohlin framework would expect, and is more compatible with a dynamic Ricardian model with catching-up features. The estimation results show that import penetration from emerging countries in the 1980s had a negative effect on employment, but this was larger in the high-skill than in the low-skill intensive industries in contradiction to a simple Heckscher-Ohlin framework; furthermore this effect in both sector groups disappeared in the 1990s, whereas import penetration from the OECD Northern countries had a negative effect during both periods for the high-skilled workers, and only in the first period for the low-skilled. Increased export orientation has a positive impact only for exports to the OECD countries in the high-skill intensive industries, whereas in the low-skill intensive industries there is a positive effect of exports only to the Southern European countries and only in the 1980s. Trade seems to affect employment growth rather than wages. With respect to wages, no significant impact of the trade variables is found in the high-skill intensive industries, but in the low-skill intensive industries during the 1980s exports to the OECD 'Northern' countries and the developing countries had a positive effect, which vanishes in the 1990s.

Stehrer (2004) also finds that the negative employment effects of import penetration and trade induced productivity effects are in most OECD countries particularly strong in the skill-intensive industries²⁰. The author concludes that sector bias of skill-biased

¹⁸ The industries are ranked with respect to the share of the white collar high skilled labor in total employment (based on the case of US) reported in OECD (1998). They also disaggregate imports with respect to the country of origin as follows: Japan, the rest of the North, Southern European Economies, Asian Tigers, Selected developing countries and the rest of the world, Eastern European countries. They use a panel data of seven countries and 23 industries provided by OECD STAN and Bilateral Trade Database. They divide the time period as 1980-89, and 1989-96, and estimate the cumulative growth rate of employment and wages for each period separately. Employment growth is estimated as a function of growth rate of labor productivity, wages, growth rates of exports and imports (multiplied by the export shares and import penetration ratios) by country group, industry and country dummies. Wage growth is also estimated as a function of the same dependent variables.

¹⁹ More advanced catching-up economies have left the more traditional labour intensive branches (textiles, apparel and leather), and the resource-based industries (mineral products, non-ferrous metals, petroleum products, wood products). Regarding imports from both developing country groups, machinery and computing equipment have the highest import penetration. The import penetration in machinery and motor vehicles from Southern European countries and the CEECs is also high. Also the main drive of import penetration from the Asian Tigers into Northern markets (and also from Japan) took place over the period 1980-89, while that from the other developing countries and the CEECs increased mainly in the later period of 1989-96.

²⁰ Stehrer (2004) uses the same database as in Landesmann et al. (2001) and using the regression approach as in Greenaway et al. (1999a) estimates the effect of export ratio and import penetration on employment, after controlling for productivity and wages for each country in separate equations; different from previous work he estimates different coefficients for high, medium, and low skill industries. In an additional regression he shows some evidence that trade integration has led to labor productivity growth especially in the skill-intensive segments, which are facing more competitive

technical change can explain the rising skill premia in spite of these adverse employment effects of trade on skilled labor demand.

Stehrer and Woerz (2006) estimates a system of equations, which allows for simultaneous interaction among employment, wages, FDI (inward stocks), exports, imports, output, productivity, and investment for a panel of OECD and non-OECD Eastern European and Asian countries over the time period 1987-2000 for eight manufacturing industries. They find evidence for a downward pressure on wage growth by inward FDI and imports. The results for employment indicate a positive inward FDI and export effect, and a negative import effect. However, since the panel includes very heterogeneous countries, the results are not directly comparable to the studies on developed countries.

OECD (2005, Chapter 2) finds that employment fell more rapidly in industries that experienced the strongest growth in international competition in 11 out of 15 OECD countries²¹. It is argued that growing trade with low-wage countries, as well as rapid productivity gains and adverse shifts in the composition of consumption demand might have played some role in increasing wage inequality in many OECD countries. Nevertheless, the overall evaluation of the report is that changing international division of labor has generated employment losses in certain industries in most OECD countries, but employment opportunities generally have improved sufficiently in other industries to preclude an adverse effect on aggregate employment; thus the long-run impact of international trade and investment on labor markets have been to raise average real wages, while inducing shifts in the sectoral and occupational composition of employment. Based on this argument, OECD (2005), albeit cautiously, concludes that it is not clear that trade with low-wage countries has been a barrier to achieving high employment and rising living standards in OECD countries. However, it is added that the future need not resemble a smooth extrapolation of the past. It is argued that the increase in fears concerning the economic implications of globalization reflects the belief that competition from low-wage countries has begun to take qualitatively new forms that will prove more damaging to workers in developed countries than in the past. Outsourcing in not only low skilled manufacturing production but also high

pressure from international integration. In this way it can be argued that trade can be an important cause of the rising wage differential. Regarding export orientation, there is evidence for a disciplining effect of export on employment in low-skill industries in Germany, Sweden and UK. Regarding import penetration effect from northern OECD in the US, Sweden and Netherlands in low and medium skill segments, in France and Germany in all sectors, and in UK in the high-skilled sectors a negative effect is found. Regarding the import penetration impact of developing countries, a negative significant impact on employment in the less skill-intensive industry for Germany and the US and for the medium-skill segment for the UK are found. Asian Tigers had a negative impact on employment in the skill intensive segments in France, Germany and the US, and a positive one in the Netherlands. No significant effects were found for Sweden and the UK. Further, there are almost no effects from trade integration with the southern OECD countries with the exception of the UK, where the effect is strong and negative in the skill intensive segment.

²¹ Average employment decline across these 15 countries is 27% in high-international-competition industries, as compared to 16% for total manufacturing during the period of 1970-2000. However, the resulting impact on the aggregate labour market is more modest since high-international-competition industries accounted for less than 4% of total employment in 2000 in these 15 countries and all of manufacturing for 22%. As opposed to this time series evidence, at the cross country level, no systematic bivariate association is found between cross-country differences in trade openness and either unemployment rates or real wages.

skilled service jobs is discussed with caution as part of this new form of international integration.

3.2 Outsourcing, FDI, and eastern enlargement

The literature on the impact of international outsourcing on employment and wages in the manufacturing sector reports qualitatively similar effects to those observed for aggregate trade, but the effects are much stronger and clearer, particularly regarding the skill composition of labor market outcomes. Outsourcing literature focuses on the effect of imported intermediate goods²². It is mostly found that imported inputs increase the demand for skilled labor and, consequently, reduces the relative wages and employment of low-skilled labor²³.

Feenstra and Hanson (1999) estimate that outsourcing explains 15% of the increase in the relative wage of US non-production workers, whereas use of computers explains 35% of skill premium²⁴. They also find a modest increase in the wage of the production workers. Their work is also a response to the promoters of skilled biased technological change as opposed to import competition as the prime cause of the increased skill premium.

Pointing at the productivity effects of outsourcing, Barry and Walsh (2005) argue that outsourcing represents an upward step on the value-added ladder, with the overall welfare effects depending on the extent of labor market flexibility. The authors show the case in Bhagwati et al. (2004) about the loss of less-skilled hardware jobs vs. gains in high-skill software jobs in the US as an example.

Regarding the effect of international sourcing of business services, there is little evidence for a detrimental impact on sectoral employment until now, probably due to the smaller magnitudes of the trade flows involved and the generally more buoyant employment performance of this sector (OECD, 2005).

As with trade, the outsourcing debate also started out in the US due to the earlier effects of NAFTA, and recently attracted increased amount of research in Europe, particularly in response to Eastern enlargement. There is increased evidence of negative effects of international outsourcing, particularly towards low wage countries, on the relative employment and wages of the less skilled workers in Europe (e.g. Hijzen 2003, Hijzen et al. 2004, Anderton and Brenton 1999 for the UK, and

²² In the literature there is a discussion on the appropriate measure of outsourcing. Total intermediate imports of an industry based on trade statistics are seen as too broad, since they may also include parts and components, which may be used by other industries or final consumers (see Egger et al., 2001 for a review). Therefore many studies, such as Feenstra and Hanson (1999) combine trade data with input-output tables. But again there is a distinction between a broad vs. narrow definition: Feenstra and Hanson (1999) argues that the total sum of imported intermediate goods in each industry may be too broad since they may also include complementary imports (e.g. energy) that could never have been produced by the sector. So the appropriate narrow measure is suggested to be the part that could be produced within the respective domestic industry.

²³ Due to data limitations mostly non-production workers are used to represent skilled labor, and production workers for unskilled labor, and it is argued that the wages for these categories are highly correlated with skill categories.

²⁴ They use a revised version of the mandated wage model.

Geishecker and Görg 2004, Geishecker 2005 for Germany)²⁵. The German evidence is pointing at not only relative but also absolute decline in unskilled wages, different from the US.

Falk and Wolfmayr (2005) estimate the effect of international outsourcing on employment at a sectoral level for a panel of seven EU countries (including Austria) and 22 industries²⁶. They find that the impact of imported materials from the low wage countries is significantly negative in less-skill intensive industries, whereas there is no negative impact from imports originating from industrialized countries. Also in higher skill industries there is no evidence of a negative effect. They report that the increase in international outsourcing to low-wage countries has decreased employment by 0.30 %-points per year over the period of 1995-2000 in less skill intensive industries in these seven EU countries. When we compare these findings with the findings in Greenaway et al. (1999a) or Landesmann et al. (2001), both of which explore the effect of aggregate import penetration, it is observed that intermediate inputs from low-wage countries may have a different effect on employment than final goods imports.

Egger and Pfaffermayr (2004) estimate the effect of international outsourcing on real wage rates and convergence in the EU-15 and the CEECs, and find that outsourcing has led to a closure of the gap within a typical EU economy via a significant pressure on industries with above-average real wage rates and a faster increase of real wage rates in industries below the country average²⁷. This result can be interpreted as follows: outsourcing increases the skill gap in the advanced economies, but decreases inter-sectoral wage gap.

Blomström et al. (1997) analyze the relation between employment in the parent firm and foreign production based on firm level data for the US and Sweden, and find some negative relationship in the US, but a robust positive relation in Sweden. They argue that Multinational Corporations (MNCs) with headquarters in the US have outsourced a considerable amount of their labor-intensive production to developing countries, whereas Swedish MNCs work with other developed countries, and increased production increases the domestic employment of production workers. Barry and Walsh (2005) cite Braconier and Ekholm (2001), who show that Swedish firms' expansion in the CEE leads to job loss in mostly low wage EU countries than

²⁵ Hijzen (2003) finds that 12% of the increase in wage inequality in the UK manufacturing during the 1990s is due to outsourcing, and Hijzen et al. (2004) find a large positive impact on skilled labor demand. Geishecker and Görg (2004) find that real wages of the low-skilled workers reduced by up to 1.8% in the 1990s, while real wages of skilled workers increased by up to 3.3% due to outsourcing in Germany based on household panel data. Geishecker (2005) find that international outsourcing towards CEE has lowered the manual workers wage bill share by 2.7 percentage points between 1991 and 2000 based on the panel data of 22 industries.

²⁶ Their database is OECD STAN and the EU input-output tables. They estimate the average annual change in employment as a function of average annual change in outsourcing (total imported materials from the same industry as a ratio to output), after controlling for change in output and real wages for the cumulative of the period 1995-2000. They disaggregate imports from high-wage and low-wage countries (new EU member states and the newly industrialising countries). They also estimate separate regressions for medium-low skill and the rest as well as for expanding and declining industries.

²⁷ Intermediate goods trade of EU15 closed the intersectoral wage gap by 5.54% per annum, whereas In the CEEC it has not affected the adjustment of average real wage rates at the manufacturing industry level.

in high wage countries, since the Swedish firms elsewhere in Europe have moved out of other low wage alternative locations of production and relocated in the CEECs.²⁸ For the case of US, Riker and Brainard (1997) also find that there is substitution between labor at home and abroad, however the substitution is greater between affiliates in countries of similar development levels.

Another group of studies on the effects of eastern enlargement of the EU present simulations based on macro models. Breuss (2001) finds that the outcome is a “win-win” situation for both the old and the new member states (NMS)²⁹. Regarding the labor market outcomes, trade effects increase employment, but migration leads to a shift from wages to profits. Heijdra et al. (2002) find small employment effects from trade, a minor increase in skilled wages, and a slightly wider wage spread for Germany³⁰. The labor market effects from migration are in the same direction, but more pronounced.

3.3 Labor's share and globalization: political economy

Regarding the changes in labor's share, a first striking feature is the sharp decline in labor share (labor compensation as a ratio to GDP) in many OECD countries since the mid-1970s and early 1980s (Diwan, 2001; Epstein, 2000). This marks a reversal after a period of rise in the 1960s and 1970s. In the United States, the aggregate trend is still small with labor's share declining by several percentage points in GDP (Harrison, 2002), but the decline in the manufacturing sector is much more dramatic (Epstein, 2000).³¹ In Europe, labor's share of aggregate income has declined as much as ten percentage points of GDP, whereas Canada, Japan, and Switzerland steadily increased their labor shares over more than thirty years (Harrison, 2002).³²

Pointing at another dimension of functional income distribution, Epstein and Power (2003) present estimates of the rentier share of national income for OECD countries for the years between 1960 and 2000. For most countries, the rentier share of income significantly increased during the last several decades, starting in the early 1980s. However this has not had a negative effect on the income share of non-financial corporate sector in the rich countries. Thus the authors conclude that financial liberalization has been associated with the increased power of an international rentier class, whose interests are aligned with those of non-financial corporations.

²⁸ However, Barry (2004) suggest that the results can be more optimistic than that according to some case studies for the traditional sectors of the lower-wage old member states, like Motor Vehicles in Spain, textiles, clothing and footwear in Portugal and Greece and ICT in Ireland.

²⁹ He estimates the enlargement effects for 13 EU countries as well as CEECs and other OECD countries using a world macro model. He simulates the effects of abolition of tariffs and trade costs, Single Market effects, FDI and labor flows, and costs of enlargement due to transfers to the CEEC, and

³⁰ They analyze the gains and fiscal costs of Eastern enlargement of the EU on incumbent countries in a general equilibrium framework and report numerical simulations.

³¹ Labor share peaked in the 70's, but has been falling since then. Epstein (2000) reports that the share for 1997, 63.6%, is the lowest since the data were collected, starting in 1948.

³² A number of European countries -Belgium, Denmark, France, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, and the United Kingdom- have experienced sharp declines in labor shares since the early 1970s.

Rodrik (1998), Diwan (2001), Harrison (2002), and Lee and Jayadev (2005) present econometrical estimates for the effect of various indicators of globalization on labor's share in GDP³³. The findings which are relevant for developed/rich countries can be summarized as follows: a negative effect of the share of trade in GDP (Rodrik, Harrison, Diwan), inward FDI³⁴ (Harrison), and large swings in the exchange rate (Harrison, Diwan, Lee and Jayadev), and a positive effect of capital controls on labor share (Rodrik, Diwan, Harrison, Lee and Jayadev) and government spending has (Lee and Jayadev, Harrison, Diwan). The latter is part of the neoliberal domestic policies that have accompanied this new era of globalization. Rodrik (1997) shows that greater international integration has led to increased economic insecurity, more volatile income and consumption. However this is so far associated with higher government spending, particularly in the case of small open economies like Austria, Sweden, and the Netherlands, who tried to compensate for the effects of trade liberalization. However faced with international tax competition some countries are facing the risk of increasing labor's share of the tax burden, since it is becoming harder to tax capital—a policy, which shifts the burden of adjustment away from capital to labor.

Glyn (2006) in a popular article points at the potential further declines in labor's share in the developed countries with the entry of China and India into the picture. He argues that what make China and India fundamentally different are their vast labor reserves. The effect of this global reserve army of labor of quite unprecedented magnitude with manufacturing wages still only 3% of the US level might hold down global share of labor significantly. Glyn argues that “the bargaining chips would be in the hands of capital to a degree not seen since the industrial revolution. Fluctuations in labor's share being confined to the range of 65-75% could disappear too.”

Regarding the threat effects, Epstein (2000) is reviewing a number of empirical studies. In terms of econometrical evidence, he is discussing the possible impact of threat effects on the increased wage elasticity of demand for labor based on Slaughter (2001)³⁵. But most of all Epstein points at the need for more direct information on the nature and existence of threats. Regarding direct evidence, he cites Bronfenbrenner (1996), who reports the results of a survey between 1993-95, which showed that 50 percent of all firms and 65 percent of manufacturing firms that were targets of union organizing campaigns threatened to close their shops and relocate if the workers voted to unionize. Although only 12 percent of those firms that ended up unionized did then really relocate, workers still found the threats credible. In particular, in cases where

³³ The estimates are based on a panel data of developed and developing countries; the authors report the differences across country groups, wherever relevant. In Harrison countries are defined as rich if they are above the median GDP per capita in 1985. Diwan and Lee and Jayadev look at developed and developing countries separately. The data set of the cross-country empirical work by Rodrik is manufacturing wages from World Bank Labor Market Data Base; the data set of other studies is based on UN national accounts database. The data extends roughly from 1970s to mid to late 1990s.

³⁴ A possible explanation for this result is that inflows capture the ease with which investment is able to enter and leave the country. This may also be capturing inverse causality.

³⁵ Slaughter (2001) finds increased wage elasticity of demand for labor (particularly for production workers) in the US manufacturing industry for the period of 1960 to 1990, and a high explanatory power for the time trend in explaining the increase in the elasticity. Thereby he argues that trade's true effect may be to increase “threat” over time (which is captured by time trend) independent of actual changes in econometric observables. But he also argues that time effect might be capturing the technological change, and it is not obvious how to distinguish these alternatives.

firms did make threats to shutdown or relocate, unions lost a significantly larger percentage of election. Epstein (2000) concludes that threat of capital mobility might be having a much bigger negative impact on workers and governments than it needs to: “globalization could be having a big negative effect only because people mistakenly believe it should!”

4 Empirical literature on Austria: the impact of trade, outsourcing, and FDI on labor market outcomes

In this section first the context of the debate about globalization and labor in Austria is defined based on stylized facts. Next the findings of the empirical research are reviewed.

4.1 Descriptive evidence

Austria is a small open economy, with a 54.2% ratio of exports of goods and services to GDP and 49.4% ratio of imports of goods and services to GDP as of 2005. The country traditionally has a small deficit in merchandise trade, which is covered by the surplus in services. Since the integration of the CEECs to the European economic sphere, the issue of globalization has attracted increased attention in the public debate as well as scientific research in Austria as the most integrated Western country to the East due to its geographical proximity as well as historical ties. Until 1989 trade with Germany, Switzerland, and Italy constituted slightly more than half of Austria's trade; trade with the CEECs was high relative to other Western European countries, but still very low compared with pre-war ratios (Aiginger et al., 1996). Quite shortly after the fall of the Iron curtain, Austria's trade with the Eastern countries increased sharply. The CEECs constitute a much more important part of Austria's trade volume compared to other EU countries, with only Germany and Finland coming close to it. In 1997 Austria's imports of manufacturing from the CEECs and former Soviet Union as a ratio to gross production were 2.5 times higher than the EU average (Egger and Egger, 2003). 17% of Austria's exports are going to Eastern Europe and the Commonwealth of Independent States (CIS), and 13% of imports are coming from there; Eastern Europe accounts for more than 2/3 of all low wage imports in Austria; 88% of total outgoing investment as of 2001 (Marin, 2004). Havlik et al. (2005) report that Austria's foreign trade with the NMS grew much more than that with the EU-14 in the last decade: during 1995-2004 Austrian exports to the EU-14 increased by 98% and imports by 81%, whereas exports to the NMS grew by 154% and imports by 220%, and despite this development NMS is the only region with which Austria has a trade surplus in commodities, which is furthermore increasing. With respect to services trade, in contrast to declining trade of Austria with the EU-14, there has been an increase with the NMS. The most important trading partners are the four neighbor countries. Austria has large trade surpluses with the NMS especially in manufactured goods, machinery and transport equipment, electrical machinery and chemicals, and has trade deficits with the NMS only in mineral, fuels, crude materials, miscellaneous manufactures, and food products (Havlik et al., 2005).

With respect to FDI, CEECs are also important for Austria. Austria's total FDI stocks in NMS as of end-2003 are nearly as much as in the EU-14 (Havlik et al., 2005). Austria's market share in all NMS FDI stocks reached 9.5% in 2003, with particularly high rates in Slovenia and Slovakia (30% and 26% respectively, Havlik et al., 2005). Austrian FDI is predominantly in services, but the ten biggest Austrian investors in the NMS represent a mix of financial and industrial capital. Regarding FDI outflow banking sector make up 30% of the total.

Different from Germany, Austria's international trade with Eastern Europe is dominated by intra-firm trade, even though outsourcing is not an important motivation of Austria's foreign investment (Marin, 2004). Almost 70% of Austria's imports from

Eastern Europe and 22% of exports are trade within a multinational enterprise, with Hungary being the extreme example.

Austria's proximity to the CEECs facilitated outsourcing or off-shoring also significantly. Outsourcing in manufacturing sector to Eastern countries grew particularly faster with an annual increase of 10.7% (in terms of Austrian gross production) during 1990-98, which is much faster than the annual growth rate of overall outsourcing (1.7%), exports (3.9%) and imports (2.8%) (Egger and Egger, 2003). Falk and Wolfmayr (2005) report the most recent stylized facts for outsourcing. Among the seven EU countries (Austria, Denmark, Finland, Germany, Italy, Netherlands, Sweden), which they examine, international outsourcing (intermediate imports) in 2000 has been most intensive for Austria with imported intermediates accounting for 14% of gross production compared to 8.8% for the average of seven EU countries. From 1995 to 2000 growth in international outsourcing has been also most pronounced for Austria, followed by Germany and Finland. For the average of all seven countries international outsourcing has risen by an average rate of 2.6% per year, whereas in Austria this rate is 6.1% per year. Outsourcing to high-wage countries (including intra-EU trade) are still dominant, reaching far higher levels (11.7% of gross production in Austria in 2000) than those from low-wage countries (2.3% in Austria in 2000). But the growth rate of outsourcing to low-wage countries has been much higher (12.6% per year in Austria during 1995-2000) than to the rest (5.1%). Nevertheless even for Austria, the observed overall increase in international outsourcing is due mainly to the increase in outsourcing to other high-wage countries. Outsourcing to the CEECs is most intense and most dynamic for Austria followed by Germany and Finland (Falk and Wolfmayr, 2005).

Egger et al. (2001) reports that the observed increase in outsourcing to the East is mainly due to a substitution of the formerly domestically sourced inputs and non-East international purchased inputs, rather than a new increase in fragmentation. Substitution away from domestic to foreign inputs is most pronounced for food, apparel, leather, pulp and paper, chemicals, and the communication industry. The share of total input materials in gross output increased only in some industries, like basic metals, office machinery and computers, indicating an increased fragmentation (Egger et al., 2001). Marin (2004) also reports that outsourcing is not limited to manufacturing and services and logistic constitute 27% of total outsourcing.

Marin (2004) questions the reasons behind outsourcing and FDI outflow towards Eastern Europe based on unit labor cost differentials (incorporating both wage and productivity differentials). She reports that on aggregate CIS countries have the lowest unit labor costs, followed by the South East European (SEE) countries, while the CEECs have already stopped to have lower costs than Austria. However based on a survey on Austrian multinationals productivity and cost data, it is found that the firms can save up to 51% of labor costs in their CEE affiliates (compared to Austria), 42% in the SEE, and 37% in the CIS.

Austria has been so far a prime beneficiary of trade liberalization in the East; however the adjustments affect industries asymmetrically. In an earlier study, Aiginger et al. (1996) report that the opening of borders aggravated the existing structural problems. During 1988-94 overall employment in manufacturing has declined by 12%, whereas in the mining sector and steel industry employment reduction reached to one third, and in textiles to 26%. However, in these sectors a similar drop had taken place

already during 1980-88. Compared to the pre-transition period in 1993 textiles exports of Austria were five times higher, whereas imports were ten times higher. They argue that Austrian position has improved in sectors with high capital intensity and slightly deteriorated in sectors with labor and skill intensity. Trade balance has shifted from a slight deficit to a large surplus. The authors see the existence of the low-cost competitors for undifferentiated products as a chance for Austria to combine low cost elements with more sophisticated factor inputs. Kubin and Rosner (2003) reports that the classical low wage sectors where Austria has a comparative disadvantage has, like clothing, textiles, leather, almost disappeared, and less than 1.5% of employment is in these industries as of 2001.

OECD (2005, Table 1.A1.1) reports a 23.2% decline in manufacturing employment in Austria from 1980-2000 as opposed to an increase of 5.8% in all industries. Among the manufacturing industries, in the sectors with the high and medium intensity of international competition employment decline by 38.3% and 21.5 % respectively; in the sectors with a low intensity of international competition as well employment declined, but only by 4.5%. The share of employment of sectors with high, medium and low intensity of international competition in total manufacturing employment are 23.5%, 52.8%, and 23.7% respectively. Their shares in total employment are 4%, 8.9%, and 4%.

Havlik et al. (2005) discuss the implications of the new division of labor in Europe for the unskilled labor, which will be further enforced in Europe, where Western Europe (including Austria) have trade surplus in business and financial services, and the NMS will become net exporters of industrial intermediate and final products. They point out that Austria is similar to NMS in terms of the educational level of the labor force, with a low share of both people with low and tertiary educational attainment. In both NMS and Austria there seems to be a scarcity of labor force with highest educational levels (reflected in very low unemployment rates), and particularly high and rising unemployment rates for the low-educated, with dramatic job losses over 1999-2003 in industry (and also agriculture in the NMS). So the employees with lowest education levels turn out to be the most vulnerable group as in most countries, particularly in industry in Austria.

Regarding the relative wage and employment of skilled labor, Egger and Egger (2003) report that during 1990-98 the skill composition of employment changed in favor of high-skilled; the ratio of high-skilled to low-skilled employment increased with an annual average rate of 4.4%. The annual increase in the relative wages of the high-skilled vs. low skilled workers was minor (0.02%, Egger and Egger, 2003). Many researchers point at the high degree of unionization and bargaining coverage (highest in EU) in explaining this asymmetry between the adjustment in employment and wages. In Austria wage determination is a result of industry-wide collective bargaining, but pattern bargaining makes it highly centralized. But Aiginger et al. (1996) also mention that subsequent negotiations at the firm level are possible, particularly in large firms, which are exposed to higher international competition. Guger and Marterbauer (2004) discuss another aspect of within wage inequality, by pointing at the high inter-sectoral wage differentials. They argue that in the mid-1980s Austria had the highest sectoral wage differentials in Europe, in spite of the corporatist structure and centrally organized trade union movement. They argue that wage differentials are determined mostly by capital intensity of the firm, skills of the labor force, profitability and the market power of the firm as well as the degree of unionization. They connect the increase in the inter-sectoral wage differentials

through time particularly to the increase in the employment of skilled relative to lower-skilled labor in certain sectors.

Another point that makes Austria an interesting case is to analyze the effects of the gains from trade and enlargement on functional distribution of income. Evidence shows that Austrian affiliates in the NMS are enjoying a high profitability (Havlik et al. 2005; Altzinger, 2006); so the question is to what extent is this high profit gains from enlargement are reflected to labor. The record in this respect so far does not reflect a positive relationship. Guger and Marterbauer (2004) report that the functional income distribution is changing in the last three decades at the expense of labor. The deterioration seems to have continued in the past years in spite of the profitability gains due to enlargement. Wage share declined from a level of 80% in 1978 to 70% as of 2002³⁶. During the stagnation phase of 2001-03, the wage share decreased further. Guger and Marterbauer (2004) list high and increasing unemployment rate, globalization, eastern enlargement, the increase in the number of firms that go public in the stock market as possible structural reasons behind the deterioration of functional income distribution at the expense of labor. They argue that rationalization waves and the decline in employment reduced the bargaining power of the workers; the increased international competitive pressures determined the conditions of wage bargaining; and the flexibilization of the labor market through outsourcing, increased temporary work contracts, new working time arrangements and part-time employment also created pressures.

4.2 Empirical findings

In the following we will particularly review the empirical findings of the existing studies on the effects of trade and outsourcing on labor market outcomes in Austria. The literature on Austria started out soon after the opening up of the CEECs. Table 1 gives a summary of the articles about the effect of trade and outsourcing on employment and wages in Austria.

Aiginger et al. (1996) is one of the earliest studies to discuss the effect of trade with Eastern European countries on unemployment and wages (based on individual data)³⁷ in Austria during the immediate aftermath of the fall of the iron curtain (1988-91). They find no significant impact of imports on unemployment, and a negative but minor impact of exports. However low-income earners benefit much less from exports; blue-collar workers, the elderly, and low income workers experience significantly higher risk of unemployment due to imports, although the quantitative impact is not very large. For the wage growth estimations, similar to unemployment results, exports have a positive and imports have a negative effect on wage growth.

³⁶ The wage share index adjusted for the employment structure (basis year of 1970) decreased even more sharply from 73% to 59% during the same period

³⁷ They use individual data provided by social security records based on a 2% sample of workers in manufacturing industry, which cover only male persons younger than 57 over the period of 1988-91. Earnings data is censored, i.e. available only up to the social security ceiling. They augment this database with the trade data with the CEECs in 25 industries for the growth of exports and imports during 1988-91 as a ratio to output in 1988. Due to endogeneity they instrument the change in exports (imports) with the level of exports (imports) and industry characteristics. In both equations they control for individual characteristics as well. They also split the sample into sub-groups of blue-collar workers, young, and low income workers.

However the export effect is small, which might be related to the pressure of competition from other Western countries according to the authors. Workers who manage to move from one industry to another are less affected by import competition, and gain more from export performance³⁸. They also find overall a larger reaction of wages to trade compared with unemployment, which places Austria surprisingly closer to the American model than the European model.

Winter-Ebmer and Zimmermann (1998) again discuss the effects of East-West trade as well as migration on wage and employment, comparing the cases of Austria and Germany based on industrial panel data for the years 1985-94³⁹. They find that rising import penetration, mainly from Eastern Europe has a small but negative impact on employment growth: a 1% increase in the import share reduces employment by 0.03%. The elasticity is somewhat higher in low wage industries and especially in industries with a higher share of foreign workers. For these industries imports from rest of the world also have negative employment effects. Exports are always insignificant. Contrary to employment reactions, wage growth is not affected by imports, but exports to the rest of the world increases wages significantly. However authors indicate that this difference could be due to the creation of relatively high-paying jobs in export industries, since only median wages are observed. Compared to Germany, where trade does not affect wages at all, and hardly affect employment, the authors conclude that Austrian labor market might be somewhat negatively affected by the Eastern enlargement.

Hofer and Huber (2003) use individual data set like Aiginger et al. (1996) and estimate the effects of trade and migration on wage growth and movements in and out of unemployment for the cumulative period of 1991-1994⁴⁰. They find that neither trade nor domestic demand affects the growth of wages of the white collar workers, whereas blue-collar workers' wages respond positively to higher domestic demand and export growth and negatively to import growth. A 1% point increase in export (import) share increases (reduces) wage growth of these workers by 0.2-0.3%. The

³⁸ They report different results for mobile vs. immobile workers. Mobile workers are those who have changed industry during the estimation period. They correct for selection bias for categories of non-employed, mobile, immobile, wage censored, and wage known.

³⁹ For Austria they use the panel data for 30 industries (excluding those that have no international trade) provided by the Ministry of Labor. Due to data limitations about mean wages, they use the growth in the median monthly gross wage in the industry. Trade effects are reflected by the export and imports to and from Eastern Europe (Czecho-Slovakia, Hungary, Poland) as well as rest of the world as a ratio to the output of the sector. They control for change in output and foreign share in both employment and wage growth estimations. They also study sub-samples, who might be more endangered by increasing internationalisation (low wage, high import, high immigration industries).

⁴⁰ Data is provided by the Social Security (Employment Data Panel), which is a 0.5% random sample of all individuals) for male workers aged between 19-54. The equations are augmented by individual and industry characteristics, and control for the endogeneity of trade, domestic demand, and migration. Different from Aiginger et al. (1995) and Winter-Ebmer and Zimmermann (1998), they do not differentiate trade with CEECs. Their time period, 1991-1994, differs also structurally from Aiginger et al. (1995), since 1989-92 was a boom period, triggered by German Unification and opening of CEE with 1.9% annual employment rate, while 1991-94 is characterized by lower employment growth and a recession in 1993. The authors also mention that they use a labor market approach rather than trade approach due to the inavailability of trade price data for Austria.

authors explain this difference by the bargaining pattern in Austria⁴¹. However given that the white and blue-collar workers bargaining process are being coordinated in most industries at an increasing degree in the recent years, the relevance of this explanation may decrease. Regarding the likelihood of becoming unemployed, they find that an increase in exports has a negative effect, whereas increased imports increase the chances of becoming non-employed. Again it is only blue-collar workers who are confronted by higher unemployment risks from imports.

Egger and Egger (2003) focus on the effects of international outsourcing on the relative employment of high-skilled to low-skilled labor based on the panel data of manufacturing industries over the period of 1990-98⁴². They find that outsourcing to Eastern countries is low-wage seeking and stimulated by shrinking trade barriers. Regarding employment effects, they find that a 1% increase in outsourcing (relative to gross production) to the Eastern countries leads to a 0.1% increase in the relative employment of high-skilled labor. Outsourcing to the Eastern countries accounts for about one quarter of the change in relative employment in favor of the high-skilled labor. Furthermore, their results indicate a positive effect of export ratio, but a negative effect of import ratio (imports defined as all imports –outsourcing to the East). The displacement effect of imports is argued to be primarily due to the effect of high-skilled imports from highly industrialized countries. Also higher capital intensity is associated with a lower ratio of high-skilled to low-skilled employment. They argue that this reflects the fact that the majority of the capital intensive industries in Austria include large former state-owned enterprises, which are specialized in low-skill intensive production. Egger and Egger (2005) also account for the spill-over effects of outsourcing across industries through input-output linkages as well as cross industrial flows of workers, and find important multiplier effects of industry-specific outsourcing. They show that indirect spill-over effects account for about two-thirds of the estimated employment effects of outsourcing.

Egger et al. (2001) presents estimations of the effects of outsourcing on wages in addition to relative employment regressions⁴³. They estimate the mandated wage changes (the wage changes, which should have been observed due to outsourcing, if

⁴¹ The trade unions of the blue-collar workers are organised according to nine branches of industry and bargaining takes place at a sectoral level, whereas the white-collar workers in the non-state sector all belong to the Union of Private Sector Employees, and thereby their bargaining is much more centralised. Also in the payment schemes of white-collar workers tenure plays a much more important role.

⁴² They use a panel of 20 manufacturing industries at the NACE 2-digit level provided by the Austrian Chamber of Commerce “Lohn und Gehaltstatistik”). Their skilled workers are classified as those with jobs requiring a high/special qualification level. They estimate two equations using two and three-stage least squares method: outsourcing to the Eastern countries, and employment of the high-skilled relative to low-skilled. Outsourcing is defined based on the narrow definition as intermediate goods imported from Eastern countries, which are produced by industry *i* firms abroad and used by firms of the same industry in Austria, and is calculated based on input-output tables via interpolating the missing years. The explanatory variables in the employment equation are outsourcing (to the East, endogenous), relative wages (endogenous, and instrumented by the degree of trade union organisation, industry price-cost margin, medium firm size), export and import openness, and capital intensity.

⁴³ For employment they use the same methodology and data as in Egger and Egger (2003).

factor markets were perfect and full employment had prevailed)⁴⁴, and find a negative change for low-skilled workers and capital and a positive change for high-skilled workers (however the latter is not robust). Comparing this effect to the actual movements in Austria, with relatively stable relative wages of skilled vs. low-skilled labor, they conclude that the existing wage flexibility has been insufficient to prevent job losses due to outsourcing.

Lorentowicz et al (2005) also analyses the relation between skill differentials and outsourcing. They estimate the changes in the share of the wage bill of the high-skilled workers in total wage bill as a function of outsourcing based on panel data for over the period of 1995-2002⁴⁵. Their stylized facts indicate an increase in the high skilled wage bill share by 3.36, relative employment by 1.97, but a very minor decline in relative wages by -0.29 over the period of 1995-2002. They find that outsourcing has a significant negative effect on the wage bill share of the skilled workers. The share of foreign multinationals also tends to increase the relative demand for unskilled labor. They interpret these findings as an indicator of the fact that Austria is a relatively human capital poor country. They also decompose relative wage and employment of the high skilled workers, and find that outsourcing has a negative impact on both. They calculate that relative employment would have grown by 24% more in the absence of outsourcing. The authors argue that the increase in the relative employment in spite of outsourcing is explained by the R&D policy of Austria. To sum up, their conclusion is that outsourcing saves on high skilled labor relative to low skilled labor, and Austria is specializing in the low skill intensive part of the value chain, as opposed to the conventional finding for other developed countries, which also indicates that Austria is a human capital scarce country (Marin, 2004). Their findings are pointing at a different direction compared to previous research (e.g. Egger and Egger, 2003, 2005; Egger et al., 2001). The difference can be primarily due to the use of outsourcing to the rest of the world rather than to Eastern Europe. Indeed Egger and Egger (2003) also find a negative effect of imports–outsourcing to the East. Other potential reasons might be the differences in the definition of high vs. low skilled workers and econometric issues regarding the endogeneity of outsourcing.

Marin (2004) estimates the effect of location decisions of multinationals on employment using firm level survey data for Austria and Germany. She estimates employment at the parent company as a function of own labor cost, labor costs at the

⁴⁴ The methodology for wage equation is mandated factor price regressions, where they first decompose the changes in price and productivity into portions attributable to structural factors and outsourcing to the East. In a second stage, they regress this decomposed price and productivity change arising from outsourcing on the factor cost shares in order to estimate the mandated changes in factor prices consistent with outsourcing alone. This estimation represents the change in factor prices that are explained (mandated) by outsourcing, i.e. the wage changes, which should have been observed due to outsourcing, if factor markets were perfect and full employment had prevailed.

⁴⁵ Wage bill is a composite variable reflecting both wage and employment changes. They use the panel data for 15 industries (2-digit level NACE) over the period of 1995-2002 for Austria, and also contrast their results with the effects on Poland as a comparison to the US-Mexico analysis of Feenstra and Hanson (1996). They start with 1995 due to the break in the classification after Austria's entry to the EU. The wage and employment data is provided by the Association of Austrian Social Insurance at skill levels for production vs. non-production workers. International outsourcing is calculated as the imported inputs from the same industry (based on input output tables) as a ratio to the value added of the industry. The other control variables are output, capital-output ratio, share of FDI employment in total employment, and R&D employment share in the sector.

affiliate locations, local and foreign demand. She finds that a 10% decline in affiliate wages in CEECs leads to a 1.6% increase rather than decline in the parent company's employment demand in both Austria and Germany. She concludes that outsourcing helps the firms to save 65-80% of their labor costs, and thereby stay competitive and create jobs. This indicates that affiliates are complementary to the parent firm. This cost advantage does not exist in SEE and CIS countries for Austria due to lower levels of productivity, and there is no significant effect of their costs on parent employment.

In an earlier study, Altzinger (1995) finds that increased net exports to CEECs led to positive employment effects in Austria. In a more recent study Bellak and Altzinger (2001) estimate the effects of the affiliate sales on the parent firm's employment by distinguishing between direct FDI (made by Austrian-owned firms) vs. indirect FDI (carried out by firms, which themselves are affiliates of foreign MNCs), which constitutes a large part of Austria's FDI. Based on survey data provided by the Austrian National Bank, they test the impact of affiliate sales on domestic employment for a given level of parent sales. The estimation results suggest that higher affiliate sales reduce parent employment, which is different from the results in Marin (2004), who find no effect. . Direct FDI are more strongly determined by labor costs and exhibit an employment pattern related to a deeper international division of labor, while indirect FDI is based relatively more on market seeking investment. In parallel to that employment effects at home differ. The positive effect of one additional unit of parent sales on domestic employment for indirect FDI compared to direct FDI is larger. Contrarily, the negative effect of one additional unit of affiliate sales on domestic employment for indirect FDI compared to direct FDI is smaller. Nevertheless, the relatively better domestic employment performance of Austrian-owned parent firms engaging in direct FDI is explained by their superior sales performance, resulting from restructuring their international division of labor.

The last group of papers discusses the effects of Eastern enlargement on Austria using numerical simulations. Kratena (2006) develops a numerical simulation example based on the parameters developed in Egger et al. (2001). Both final goods trade and outsourcing to Eastern Europe lead to negative effects on unskilled labor. For the same (negative) impact on unskilled labor final goods trade and outsourcing have the same influence on the other sector, but with final goods trade the skilled wage rate and production declines in the import competing sector whereas with outsourcing skilled wage rates and production in both sectors rise indicating the advantage of outsourcing.

Keuschnigg and Kohler (2002) and Kohler and Keuschnigg (2001) present calibrated numerical simulations, based on a general equilibrium model to test the effects of eastern EU enlargement on Austria. Their model incorporates sectoral allocation of capital and labor (skilled/unskilled), product differentiation, imperfect competition, as well as the government budget and financial transactions with the EU –a significant point, since Austria is one of the largest net contributors to the EU. Their numerical simulations indicate that, while ambiguous a priori, the dynamic integration gains outweigh the fiscal burden for Austria. It is found that enlargement is expansionary. The increase in capital intensity increases also wages for both the skilled and unskilled labor, and contrary to traditional expectations and to results from regression analysis in other research (e.g. Egger and Egger 2003), integration (via European Agreements) compresses the wage spread between skilled and unskilled labor, although at a moderate rate. They justify this result by the observation that in the CEECs as in many less-developed countries, there was a relatively high level of

import protection for low-skill-intensive sectors compared to the level of protection in these sectors in incumbent countries of the EU. Thus authors argue that while enlargement implies that low-skill labor in Austria loses some of its import protection, it enjoys significant advantages of entering less heavily protected export markets for low-skill products in the CEECs⁴⁶. In the scenario with the membership of the CEECs, there is less potential for differential wage effects, since real trade costs, unlike tariff cuts, are reduced symmetrically across sectors.

Based on the simulations of a world macro model, Breuss (2001) argues that Austria is probably the biggest winner of enlargement with an expected real GDP increase by 0.75% of GDP over a six year period (2005-2010) due to important Single Market effects⁴⁷. Breuss and Schebeck (1999) report more detailed simulation results based on WIFO's macro-econometric model for Austria across a time horizon of nine years (2002-2010). Due to the shock decline in import prices in the first year, it is expected that a number of domestic goods to be substituted with imported ones, and hence real GDP and employment sinks, and unemployment rises. But low prices at home are expected to gradually cause real demand and GDP to grow (till 2010 by a cumulative 0.4 percent). Due to FDI outflow, assuming that one third of the additional FDI is of a substitutive nature (at the expense of investments in Austria); they expect a reduced growth in real gross fixed investment in Austria by 0.2% p.a., or by a cumulative 1.8% till 2010. In cumulative terms, this translates into a real GDP decline by 0.2% by 2010 and job loss under 5,000. As an outcome of the overall macroeconomic results, functional income distribution is projected to slightly shift at the expense of wage earners for the benefit of employers.

In the following we summarize the empirical results of the regression analysis on the labor market effects of globalization in Austria:

1) Effects of trade (total –final and intermediate) on:

a. Employment (unemployment)⁴⁸:

- i) A minor or insignificant impact of exports (Aiginger et al. 1996; Winter-Ebmer and Zimmermann 1998, Hofer and Huber 2003)
- ii) Either no or small impact of imports (Aiginger et al., 1996; Winter-Ebmer and Zimmermann, 1998; Hofer and Huber 2003); negative effect for blue-collar workers, the elderly, and low income workers (Aiginger et al. 1996; Hofer and Huber, 2003), or in low wage industries and in industries with a higher share of foreign workers (Winter-Ebmer and Zimmermann, 1998)

b. Wages:

⁴⁶ The authors also argue that these results are consistent with the simulation results for sectoral changes, which indicate above average rates of increase in production in some unskilled sectors like the chemical and textiles and clothing industry in Austria. However, this outcome is not in line with observed structural changes in Austria.

⁴⁷ He also finds much less important trade and migration effects, and some negative effects of FDI outflow and transfers

⁴⁸ The results are relatively similar with respect to aggregate vs. Eastern trade effects, or the use of individual vs. sectoral data.

- i) A negative effect of imports from the East based on individual data (Aiginger et al. 1996), no effect at a sectoral level (Winter-Ebmer and Zimmermann 1998)
- ii) small positive effect of exports to the East based on individual data (Aiginger et al. 1996), and of exports to ROW at a sectoral level (Winter-Ebmer and Zimmermann, 1998)
- iii) less import effect, and more gain from export for mobile workers (Aiginger et al. 1996)
- iv) no effect on white collar wages, positive export and negative import effect on blue-collar wages based on individual data (Hofer and Huber, 2003)
- c. Relative employment of high-skilled to low-skilled labor: A positive effect of exports, a negative effect of imports other than outsourcing to the East (Egger and Egger 2003)

2) Outsourcing:

- a. Relative employment of high-skilled to low-skilled labor: positive effect of outsourcing to the CEECs in Egger and Egger (2003), but a controversial negative effect of total outsourcing in Lorentowicz et al (2005), which might be due to the different effects of outsourcing to the CEE vs. to the whole world.
- b. Wages: a negative mandated⁴⁹ change for low-skilled workers and capital and a positive change for high-skilled workers (latter is not robust) in Egger et al. (2001), again a controversial negative effect in Lorentowicz et al (2005).
- c. Effects of affiliate wages and sales on employment:
 - i) Negative effect of affiliate wages in CEECs on parent company's employment –affiliates are complementary (Marin 2004)
 - ii) Negative effect of affiliate sales on parent employment in Bellak and Altzinger (2001), whereas no effect in Marin (2004).

3) Simulation results about the effects of Eastern enlargement or trade with the CEECs

- a. a slight shift in functional income distribution at the expense of wage earners for the benefit of employers in Breuss and Schebeck (1999)
- b. negative effects of both final goods trade and outsourcing to Eastern Europe on unskilled labor; a negative effect of final goods trade on the skilled wage rate in the import competing sector, but a positive effect of outsourcing on skilled wage rates in all sectors in Kratena (2006).
- c. a controversial finding indicating a decline in the relative wage of skilled to unskilled labor in Keuschnigg and Kohler (2002)

⁴⁹ See footnote 44.

Tabelle 1 Summary of selected articles about the effect of trade, outsourcing and FDI on employment and wages in Austria

Trade
<p>Aiginger et al. (1996)</p> <p>Coverage: individual data (social security records) 2% sample of workers in manufacturing industry, only male persons younger than 57, dis-aggregation for blue-collar workers, young, and low income workers, 1988-91</p> <p>Description: effect of trade with Eastern European countries on unemployment risk and wages (censored)</p> <p>Results: a) no significant impact of imports on unemployment, and a negative but minor impact of exports; significant but low positive impact of imports on unemployment of blue-collar workers, the elderly, and low income workers</p> <p>b) small positive effect of exports and a negative effect of imports on wage growth; less import effect, and more gain from export for mobile workers; a larger reaction of wages to trade compared with unemployment</p>
<p>Winter-Ebmer and Zimmermann (1998)</p> <p>Coverage: panel data for 30 industries (Ministry of Labor for Austria) in Austria and Germany, 1985-94</p> <p>Description: effects of trade with Eastern European countries (and with the rest of the world) and migration on wage (median monthly gross for Austria) and employment growth; distinguish low wage, high import, high immigration industries</p> <p>Results: a) insignificant exports; rising import penetration from Eastern Europe has a small negative impact on employment growth; higher elasticity and an additional negative effect of imports from rest of the world (ROW) in low wage industries and in industries with a higher share of foreign workers.</p> <p>b) wage growth is not affected by imports, exports to ROW increases wages.</p>
<p>Hofer and Huber (2003)</p> <p>Coverage: individual data (Social Security), 0.5% random sample of all individuals, male workers aged between 19-54, 1991-1994</p> <p>Description: effects of trade and migration on wage growth and movements in and out of unemployment</p> <p>Results: a) no effect on white collar wages, positive export and negatively import effect on blue-collar wages.</p> <p>b) negative effect of exports and positive effect of imports (only blue-collar workers) on the likelihood of becoming unemployed</p>
Outsourcing and FDI
<p>Egger and Egger (2003)</p> <p>Coverage: panel of 20 manufacturing industries (Austrian Chamber of Commerce and own outsourcing measure based on input output tables), 1990-98</p>

<p>Description: the effects of international outsourcing to the CEECs on the relative employment of high-skilled to low-skilled labor</p> <p>Results: positive effect of outsourcing to the CEECs on the relative employment of high-skilled to low-skilled labor; a positive effect of exports, a negative effect of imports other than outsourcing to the East.</p>
<p>Egger et al. (2001)</p> <p>Coverage: as in Egger and Egger (2003)</p> <p>Description: the effects of international outsourcing on skilled vs. unskilled wages (in addition to relative employment as in Egger and Egger 2003)</p> <p>Results: a negative mandated change for low-skilled workers and capital and a positive change for high-skilled workers (latter is not robust)</p>
<p>Lorentowicz et al (2005)</p> <p>Coverage: panel data for 15 industries (2-digit level NACE), Austria (source: Association of Austrian Social Insurance and own outsourcing measure based on input output tables) and Poland, 1995-2002</p> <p>Description: the effect of international outsourcing on the changes in the share of the wage bill of the high-skilled (non-production) workers in total wage bill, relative employment, and relative wages</p> <p>Results: negative effect of outsourcing on the wage bill share of the skilled workers, relative employment and wage of the skilled to unskilled workers, negative effect of the share of foreign multinationals on the wage bill share of the skilled workers</p>
<p>Marin (2004)</p> <p>Coverage: firm level survey data for multinationals in Austria and Germany</p> <p>Description: the effect of affiliates wages on parent company's employment</p> <p>Results: a negative effect of affiliate wages in CEECs on parent company's employment (affiliates are complementary); no effect of affiliate output</p>
<p>Bellak and Alzinger (2001)</p> <p>Coverage: survey data provided by the Austrian National Bank</p> <p>Description: the effects of the affiliate sales on the parent firm's employment by distinguishing between direct FDI (made by Austrian-owned firms) vs. indirect FDI (carried out by firms, which themselves are affiliates of foreign MNCs)</p> <p>Results: higher affiliate sales reduce parent employment; the positive effect of one additional unit of parent sales on domestic employment for indirect FDI compared to direct FDI is larger; the negative effect of one additional unit of affiliate sales on domestic employment for indirect FDI compared to direct FDI is smaller.</p>
<p>Simulation results about the effects of Eastern enlargement or trade with the CEECs</p>
<p>Breuss and Schebeck (1999)</p> <p>Coverage: Austria, simulations for 2002-2010</p>

Description: WIFO's macro-econometric model

Results: a slight shift in functional income distribution at the expense of wage earners for the benefit of employers; GDP to grow till 2010 by an additional cumulative 0.4 percent; a job loss under 5,000 due to FDI outflow

Kratena (2006)

Coverage: Austria

Description: Numerical example based on the stylized facts in Egger et al. 2001

Results: negative effects of both final goods trade and outsourcing to Eastern Europe on unskilled labor; a negative effect of final goods trade on the skilled wage rate in the import competing sector, but a positive effect of outsourcing on skilled wage rates in all sectors in

Keuschnigg and Kohler (2002)

Coverage: Austria, simulations

Description: General equilibrium model

Results: a controversial finding indicating a decline in the relative wage of skilled to unskilled labor

5 Economic policy debate

The policy debate regarding the effects of globalization on labor market outcomes can be summarized as a spectrum with two opposite ends reflecting the differences in the theoretical approaches: On the one end, the emphasis is heavily on the need for further labor market deregulation, and methods to increase the wage flexibility and mobility of the unskilled workers (e.g. OECD, 2005). On the other end takes place the political economy approach emphasizing the role of industrial policy to enhance the investment and job creation potential of the economies, and international macroeconomic policy coordination and labor cooperation to prevent the destructive competition among workers in different countries.

5.1 Mainstream Approach

OECD Employment Outlook and Job Strategy reports are mostly a good summary of the guidelines that shape mainstream economic policy, and they are a representative outline of EU employment policies as well, with usually more academic content than the European Commission's Employment reports. Therefore we start with a detailed summary of the OECD approach.

OECD (2005) sees the challenges of globalization as an adjustment process, which can be solved by well-functioning labor markets that enable workers to move smoothly from declining to expanding sectors. Nevertheless, accepting the existence of trade related adverse labor market effects, OECD Employment Outlook in 2005 discusses the policy tools available to reduce these costs or to compensate the workers most affected. The trade adjustment costs are related to an increase in job displacement, long unemployment spells, even labor force withdrawals (particularly in Europe), or large wage losses after re-employment (particularly in the US). The motivation is particularly related to the fact that adjustment costs are higher for trade-displaced workers than for other job losers, and the losses are higher for workers displaced from industries facing the most intense international competition. It is found that displaced manufacturing workers are mostly older, less educated, with vocational skills specialized to declining occupations and industries, and had a high tenure on the lost job, which not only increase the re-employment difficulties, but also lead to large earnings losses in case of re-employment.

However, since OECD expects trade to result in an increase in aggregate income, there is room for winners to afford compensation for the losers and still have net gains. Table 3 below is a summary of the general vs. targeted, and direct vs. indirect policy tools in OECD (2005).

Table 2. A partial taxonomy of measures for reducing labor-market adjustment costs from trade

Types of measures	Direct	Indirect
General	<p>Unemployment insurance and other income-replacement benefits available to all displaced workers and/or all unemployed under common rules.</p> <p>Active labour market programmes available to all displaced workers and/or all unemployed under common rules.</p>	<p>Macroeconomic policies conducive to strong growth and high employment.</p> <p>Framework conditions for efficient reallocation of labour in response to structural change (e.g. adjustment-friendly EPL and wage-setting institutions).</p> <p>Education and life-long learning programmes to up-skill the workforce.</p> <p>Broad trade policy measures to restrict imports ("protectionism").</p>
Targeted	<p>Special adjustment assistance or supplementary income-replacement benefits to all trade-displaced workers.</p> <p>Special adjustment assistance to specific subgroups of trade-displaced workers (e.g. job losers in specific firms or sectors which face intense import competition).</p>	<p>Industry redevelopment or rationalisation programmes (e.g. tax subsidies, public-private partnerships to develop new sources of comparative advantage).</p> <p>Local economic development.</p> <p>Industry-specific trade policy (e.g. trade safeguards or anti-dumping measures under WTO rules).</p>

*Source. OECD (2005:51)

“Memo item: Other strategic choices involve finding: i) the right balance between proactive measures (e.g. advance notification and encouragement to the reassignment of workers within firms) and reactive measures (e.g. job search assistance and unemployment benefits after job loss); ii) the right balance between compensating trade-displaced workers for their losses and maintaining incentives for them to move quickly into new jobs that make good use of their skills; and iii) the right division of responsibilities between the public and private sectors for financing, administering and delivering adjustment assistance measures.” OECD (2005:51).

It is argued that general indirect policies are particularly important in strengthening job creation and steering workers to sectors where they are most productive. It is hoped that these policies will create a “win-win” situation, and decrease the political opposition to international economic integration. Regarding the indirect general policy tools, although the summary table mentions macroeconomic policies conducive to growth and employment, and broad trade policy measures to restrict imports, neither are discussed in the report, and the emphasis at the macroeconomic level is on measures to achieve the flow of labor from declining industries to expanding ones, which is again connected with a call for flexibility under the name of adjustment friendly employment protection legislation. Direct assistance (e.g. earnings-replacement benefits) for the trade-replaced workers is also suggested but certain reserves about the appropriate balance between proactive and reactive measures, and incentive and equity related problems are mentioned -the extent to which it is desirable to differentiate between trade-displaced workers and other displaced workers; how compensation can best be provided without undermining incentives to search actively for a new job. Eventually, while general (direct) earnings-replacement and active labor market policies are found to be preferable, targeted programs under certain specific conditions are considered as useful supplements, particularly in cases of mass lay-offs in declining regions or a particular region. OECD (2005) concludes by pointing at the need to meet this challenge via proper policies to live up to what the new labels such as “flexicurity” or “protected mobility” are demanding.

The European Commission's Employment reports draw an optimistic picture for the West as well as the East, while addressing the possibility of unskilled and older to face losses in both regions. This argument rests on broad generalizations from the existing literature, and argues that globalization has positive and negative effects, but altogether this process brings overall gains for European workers and consumers (European Commission, 2004). Dynamic economies are hoped to create jobs and opportunities for workers, however this requires adaptability. It is argued that the rate of structural change is sufficiently slow to produce no large adjustment costs in the short run and overall gains in the long run. Although there may be a bias towards higher skills and the distributional effects can be magnified due to lack of labor mobility across sectors, regions, and countries, it is argued that the previous periods of enlargement shows that the expected negative impact on employment and wages did not occur, or were at worst limited to certain sectors. The report also adds that FDI affects the relative wages in NMS rather than in the EU15. The Commission, similar to OECD, sees the task of economic policy as to target the losers without disturbing market incentives.

In the newly growing academic research the replacement of unemployment benefit systems with compensation mechanisms for the losers of dislocation and outsourcing is also being discussed (see Barry and Walsh, 2005 for a review of the academic literature on the issue).

5.2 Labor Organizations and Political Economy Approaches

The response of the labor organizations to the policy debate on trade and relocation induced losses is to emphasize the centrality of full employment targeting macroeconomic policies and a coherent industrial policy to face the challenges of technological change and competition (e.g. Galgoczi et al., 2005 from the European Trade Union Institute). This includes pro-active use of macroeconomic demand policies, and industrial priorities as well as public investment programs to channel investment in areas with the most future potential, and to transform old declining industrial areas. In order to be able to reduce the damage and increase control as well as adaptability, Galgoczi et al. (2005) also bring up the participation of worker's representatives and transparency in the decision making process as a crucial issue. This becomes also an important aspect to anticipate the change, if relocation becomes nevertheless an actual issue. Regarding the control of such decisions, one critical question is whether it is acceptable for a company that is already earning a reasonable return to relocate for the sole purpose of increasing its profits. Finally, if the relocation takes place, Galgoczi et al. (2005) argues that the costs should be shared by the employers as well and not only by the state and the workers affected. Nevertheless, the most vital policy tool is the coordination of collective bargaining activities in order to avoid the beggar-thy-neighbor-policies as well as the relocation threats of the employers to suppress union demands. A European wide cooperation is recommended in order to avoid the drifting apart of wage and productivity trends within Europe and to achieve a gradual upward convergence of income levels (Galgoczi et al. 2005).

In order for the European labor to benefit from the gains of integration, the institutional setting of wage bargaining must be coordinated, including productivity-led wage increases, and a European framework for minimum wages, and working hours and conditions. Convergence towards a more supportive legal environment in which workers can collectively advance their interests at the national level as well as

international level will be a crucial starting point. Regarding the existing labor market institutions in Europe, there is empirical evidence, which shows that not their strength but their erosion goes hand in hand with the rise in unemployment and within labor inequality⁵⁰. If so, labor market deregulation creates only distributional effects, without changing the route of the problem, or making it even worse due to demand deficiency problems. Rather than dismantling the labor market institutions in Europe, we have to derive lessons from the achieved standards in the most developed cases for the late comers. The same also applies to welfare state policies

The current dilemma of the international labor movement can be summarized as follows: While the workers of the North or the West are scared of losing their jobs and former gains, the workers of the South or the East are suspicious that the Northern/Western workers are protecting the good jobs from them, and in the meantime benefiting from their cheap labor in terms of cheap imports of consumption goods. As this poses obstacles to cooperation and coordination, firms are benefiting from this coordination failure. The potential risks of this process for the labor in the advanced countries have been discussed extensively in this report. In the meantime, it is not unambiguous that workers in the East or South are benefiting from openness under the current terms of bargaining between labor and capital (Rodrik, 1997; Diwan, 2001; Harrison, 2002; Onaran, 2004; Burke and Epstein, 2001). Regarding the results of EU enlargement, there is a newly growing literature on the effects of enlargement on labor in the East as well, and the results point at some evidence about the downward pressure over the bargaining power of labor in the CEECs as well (Onaran and Stockhammer, 2006; Bohle and Greskovits, 2005; Galgoczi, 2003). Wages systematically lag behind productivity increases, and trade and FDI do not deliver the promises in spite of a rather flexible labor market. In terms of the share of labor, positive demand effects of integration seems to be offset by negative international competitive pressures. Egger and Stehrer (2001) find some positive effect of intermediate exports on unskilled wages but their results also show that final goods exports have a negative effect that more than offsets this negative effect. Although MNCs tend to pay higher wages than local firms in most developing countries as well as in the CEECs, there are also many anecdotal stories concerning threats by companies to move to sites with even lower wages, if workers try to unionize or raise their wages (Burke and Epstein, 2001). Galgoczi et al. (2005) warn that all workers may lose from such developments, with workers in higher-wage countries seeing their income decrease while workers in lower-wage countries seeing the prospects to improve their wages vanish.

Overall if the race to the bottom is hurting significant parts of labor alike in the West/North and the East/South, there is scope for international cooperation, in case the coordination failure can be overcome. Although country specific conditions are also important in determining how pro-labor alliances for an intervention to reverse

⁵⁰ Time series evidence shows that employment protection legislation, the generosity of minimum wages, and unemployment benefits do not explain the rise in the European unemployment (Stockhammer, 2004; Howell, 2005). Stockhammer (2004) relates the rise to the slow down in investment and the rise in financialization.

the non-egalitarian outcomes of globalization could be built⁵¹, the objective interests point at the relevance of international labor alliances.

Currently the organizational and political power of labor vs. capital is rather asymmetrical at an international scale. The unlimited freedom to move goods and capital across different markets and production units is very important for the profitability of the MNCs, and therefore they are willing to invest enormous resources through their collective organizations and individually to push for international rules that enhance their protections (e.g. investment agreements) and to avoid rules that limit their own mobility, flexibility, and access to profitable projects across the world (Burke and Epstein, 2001). This is coupled with the disadvantageous position of the developing or catching up economies in terms of their dependency on international capital for growth. The international policy agenda pushed under these circumstances is disarming the developing or catching up countries to design their independent development strategies, and in the meantime international funds to support a genuine industrial policy are also non-existent. So the Southern countries are finding themselves in a position where too much labor chases too little capital across the world, and pressurized both by the international and domestic large scale capital, they sign bilateral and regional investment agreements that reduce their control over investment decisions (Burke and Epstein, 2001).

Based on this reading we can derive the following lessons for the case of the Eastern enlargement of the EU, where the cohesion funds are much more limited than those during the Southern enlargement. In this second stage of enlargement, EU has abandoned the task of cohesion and convergence to private capital flows and international trade. Stability and Growth Pact as well as the market friendly rules of the EU are in the meantime limiting any possibility in the NMS themselves for public investments as part of an industrial policy with well-defined strategic priorities. Similarly it is impossible for the NMS to manage FDI inflows according to an industrial policy. Disarmed of their policy tools, NMS find it a positive prospect to plainly attract FDI, particularly as opposed to a pure reliance on financial capital flows, which have had much more destructive effects in South East Asia and Latin America in the 1990s. These are the objective conditions under which the NMS find themselves obliged to get involved in wage as well as tax competition.

However, negative effects of openness or regional integration are not an unavoidable destiny, rather an outcome of the current domestic and international policies. Openness and regional integration can be also managed in a way to benefit both the richer and poorer partners, if trade and investment flows are designed as part of an egalitarian and growth-oriented international economic policy. In the European context, labor in the old and new member states as well as the accession countries have more common ground than they can currently exploit. This common ground must combine the ruling out of destructive wage (and tax) competition with a coherent and coordinated EU-wide policy for social and economic convergence.

⁵¹ As the domestic-oriented firms in the poorer countries or small scale firms in rich countries are also adversely affected by stronger multinational firms of the richer countries, there is a debate on whether there is room for broader alliances. However while the small domestic firms tend to support protectionist ideas, they seem to line with the liberal policies regarding the labor market deregulation at the national scale, which bring them closer to the large scale and international capital.

Based on this common ground, then the policy debate can reach a mature stage where also possible conflicts across regions, countries or social partners can be addressed.

The current income and growth policy in Europe, which places wage competitiveness at its center, is not only undesirable but also not sustainable. Wages that lag behind productivity growth, i.e. a low wage share in GDP, leads to a deficiency in aggregate demand, and even with flexible labor markets fails to generate growth with jobs. The policy design needs to address the bottlenecks at the demand side of the labor market, rather than a mere focus on the supply side.

The macroeconomic framework, which would achieve this target and in the meantime facilitate the common ground for labor in the East and the West, needs to combine industrial and technology policy with employment and social policy. Industrial and technology policy should set investment priorities and recognize the significance of public investment to achieve these ends. The regional and cross-country distribution of these investment programs should be based on dynamic long term targets instead of static comparative advantages. The target of monetary and fiscal policy should be to achieve full employment under decent working conditions as opposed to mere price stability. The flow of goods, services and capital should be subject to these social and economic convergence priorities. To achieve stability, particularly international coordination for regulation in financial markets, tax harmonization, and controls on capital flows need to be achieved.

Extending this principle of international cooperation to a global sphere, a platform for consensus between the rich and poor countries about international labor rights and standards can also be constructed. The increased room for development policy and international cooperation could address the worries of the poor countries about the potential negative effects of labor standards on employment or informalization. Luce (2005) argues that the relationship between labor law, wages, economic growth, employment and inequality depends greatly on macroeconomic and political variables, and evidence does not indicate an unambiguous negative relation between labor standards and employment. Eventually the results depend on the way in which the fight for the labor standards happens and the way in which they are used. Also regarding the international campaigns to push for labor standards, she emphasizes the relevance of constructive international campaigns, where the workers affected have a voice in the direction of the campaign, and can turn the international support for labor standards into a gain in their organizational efforts; these are the basic conditions, which distinguish a constructive campaign from one that can harm workers. As part of an international labor agenda Luce also points at the importance of union efforts at cross-border organizing, such as unions working in the same industry in different countries sharing resources and information, sometimes even sending organizers to each other's countries, and organizing joint campaigns against the same employer. These are insightful experiences also for the East-West cooperation in Europe. Clearly the international labor agenda and convergence towards higher standards is just at the beginning and will take time. Luce (2005) points at the fact that even the struggle for labor standards within the US took a very long time: although bringing all states under a common labor code was on the agenda actively from 1906 on, it could finally be implemented in the form of the Fair Labor Standards Act in 1938.

6 *Implications for future research*

In the empirical literature, there is some evidence that trade – inter-industry trade with low wage countries as well as intra-industry-trade with developed countries- lead to job and income losses for workers in import competing industries and in particular for the less skilled labor (e.g. Revenga, 1992; Sachs and Shatz, 1994; Greenaway, 1999a; Landesmann et al., 2001). There are, however, important differences in the estimated magnitudes of these effects. There are also differences in the responsiveness of employment vs. wages across countries: the typical argument is that different from US, in Europe employment, rather than wages carry the burden of adjustment. Based on this argument, a link is built to the debate about the relatively strong labor market institutions in Europe. The time dimension of the adverse effects is also not clear: the optimistic approach expects that they will gradually disappear as the welfare gains of trade lead to upgrading in the economy (Bhagwati et al, 2004; OECD, 2005). Adding another dimension to the controversies, the studies that focus on the effects of trade flows to explain adverse labor market effects are criticized by trade-theoreticians, who argue that the observed changes in import prices and volumes have not been sufficient to explain the large changes in relative wages, and technological change is the main reason for the decline in the relative wage of the unskilled workers (e.g. Lawrence and Slaughter, 1993). More recently the rising importance of imports of intermediate inputs (international outsourcing) has generated some consensus that both intermediate goods trade with low wage countries and technology lead to deterioration in the labor market outcomes for less skilled labor (e.g. Feenstra and Hanson, 1999). It is also emphasized that import penetration may stimulate defensive innovation; thus trade may have an indirect effect on wages (e.g. Stehrer, 2004; Greenaway et al., 1999b). Recently, the controversy within trade theory has gained a new dimension with the contribution of Samuelson (2004), who argues that if the countries start from a situation of initial trade rather than autarky, an increase in the productivity of the less developing country in the export industry of the developed country leads to a reduction in terms of trade at the expense of the developed country. The case behind the debate is the technological catching-up of China, which may result in an adverse shift in terms of trade against the US and a permanent reduction in the US per capita real income, even as world income increases.

There is also no consensus on whether the deterioration in the labor market outcomes for the less skilled workers are accompanied by a general deterioration in labor's bargaining position in developed countries. While some authors from both labor economics and trade theory approaches argue that there is not a general downward pressure on the average wage level, but only a rise in wage inequality (Krugman, 1995; Lawrence and Slaughter, 1993; Revenga 1992; Sachs and Shatz 1994; Feenstra and Hanson, 1996), the labor disciplining effects mentioned in both labor economics approaches (e.g. Freeman, 1998; Greenaway et al., 1999a&b; Slaughter, 2001) and the political economy literature (e.g. Rodrik, 1997; Epstein, 2000) indicate that it is worth looking at the link between globalization and the bargaining power of labor. This is particularly important given the general declining trend in labor's share in many developed countries, which is not addressed in most of the trade literature. Also an increasing number of studies emphasize that labor disciplining and threat effects of globalization may not be directly reflected in the actual volumes of trade and capital flows, and call for direct qualitative evidence on these effects.

To sum up the common findings and relevant questions, there is some evidence of trade on labor market outcomes in import competing industries and in particular for the less skilled labor either through direct effects or trade induced technology effects. Independent of the important differences in theoretical approaches, a common point is that unskilled labor is more fragile with respect to these effects than skilled labor. However the controversy remains whether this difference is only a relative disadvantage with respect to skilled labor or an absolute disadvantage. Also it is an empirical question, whether skilled labor's wage or employment gains suffices to improve their share in value added, or whether income distribution between skilled labor and capital is also deteriorating due to productivity gains. Finally the changes in both skilled and unskilled labor's share determine the outcome regarding the functional income distribution between labor and capital. In the case of European countries, since the adjustment is mostly in terms of employment, an analysis of income distribution requires estimates of both wage and employment effects. The combination of wage, employment and productivity developments determine eventually the share of wages (wage bill) in value added in a sector. So a full analysis of the distributional impacts of globalization has many dimensions: changes in wages and employment, and the share of wages in value added for unskilled and skilled labor as well as at an aggregate level.

Another important finding in the literature is that the negative trade effect stems from not only inter-industry trade with low wage countries but also intra-industry-trade with developed countries. But research results point at significant heterogeneity in that respect, and show that the composition and origin of imports do matter. Another level of heterogeneity is that the effects vary across sectors. To address these issues, it is important to distinguish intermediate vs. final goods imports, the origins of imports (low-wage vs. high-wage as well as catching up vs. other developing countries and developed countries), and different sector groups (high, medium, low skilled).

The effects of capital flows are analyzed mostly in firm level studies, but an estimation of the effects of FDI outflow on wages and employment at a sectoral level is a relevant extension to the studies on trade and outsourcing effects. This is also a way of testing the threat effects, in case they are reflected by the volume of flows.

Finally, if trade or capital mobility affects the elasticity of labor demand and the bargaining power of labor, this then not only leads to a shift in the labor demand or wage bargaining curve, but also changes the responsiveness of employment to production and wages, and wages to productivity and unemployment. Many studies conclude that the effects of openness on labor market outcomes are beyond what the volumes of trade and capital flow indicate, and are related to a general shift in the terms of bargaining and labor demand in an era of intense competition and high capital mobility. Thus it is not openness per se, but the conditions under which it takes place –i.e. the shift of balance of power relations implied by openness- is what may be hurting labor. Then the policy debate must also focus in this area. A full accounting of the channels through which trade and capital flows affect labor will also be important to determine the correct policy tools. If globalization is leading to labor disciplining effects or decreasing the employment creation capacity for a given level of output, then opting for further flexibilization in labor market intensifies the problem rather than solving it. If globalization has significant effects on wages, be it skilled/or unskilled wages, a social consensus oriented policy requires an evaluation of the shifts in the bargaining power of labor and capital.

References

- Aiginger, K., Winter-Ebmer, R., and Zweimüller, J., 1996. Eastern European Trade and the Austrian Labour Market, *Weltwirtschaftliches Archiv*, 1996, 132(3), 476-500.
- Anderton B., and Brenton, P., 1999. Outsourcing and low-skilled workers in the UK, *Bulletin of Economic Research*, 51, 267-285.
- Altzinger W., 1995. Beschäftigungseffekte des österreichischen Osthandels, 1989-1994. Department of Economics, Vienna University of Economics and Business Administration Working paper No.34.
- Altzinger, W., 2006. On the profitability of Austrian firms in the new EU member states, Vienna Institute for International Economic Studies, Monthly Report, 3/06, 4-10.
- Barry, F. 2004. Enlargement and the EU Periphery: Introduction, *World Economy*, 27(6), 753-59
- Barry, F. and Walsh, F., 2005. Gains and Losses from Sectoral Relocation: A Review of Theory and Empirics, Keynote Address to conference on "Relocation of Production and Jobs to CEECs: Who gains and who loses?", Hamburg, 16 - 17 September 2005.
- Baldwin, R.E. and Cain, G.G., 2000. shifts in relative US wages: the role of trade, technology, and factor endowments, *Review of Economics and Statistics*, 82 (4) 580-95
- Bellak, C., and Altzinger, W., 2001. The impact of direct and indirect FDI in Eastern Europe on Austrian trade and employment., in: Narula, R. (ed.): *Trade and Investment in a Globalising World: Essays in Honour of H. Peter Gray.*, Pergamon Press, Kidlington, 86-112.
- Bhagwati, J., and Dehejia, V.H., 1994. Freer trade and wages of the unskilled – is Marx striking again?, in Bhagwati, J., and Koster, M.H. ed., *Trade and Wages: Leveling Wages Down?* Washington DC: American Enterprise Institute, 36-75.
- Bhagwati, J., Panagariya, A., and Srinivasan, T.N., 2004. The muddles over outsourcing, *Journal of Economic Perspectives*, 18 (4), 93-114.
- Blecker, R., 2002. Distribution, demand and growth in neo-Kaleckian macro-models. in: Setterfield (ed): *The economics of demand-led growth*. Cheltenham, UK: Edward Elgar
- Blomström, M., Fors, G. and Lipsey, R.E. , 1997. Foreign direct investment and employment: home country experience in the United States and Sweden, *Economic Journal*, 107, 1787-97.
- Bohle, D. and Bela Greskovits 2005, Capital, labor, and the prospects of the European social model in the East, *Central and Eastern Europe Working Paper 58*, Central European University.
- Borjas, G., Freeman, R., and Katz, L., 1992. On the Labor Market Effects of Immigration and Trade, in G. Borjas and R. Freeman, eds. *Immigration and the Workforce*. Chicago: University of Chicago Press/NBER, pp. 213-244.
- Braconier, H., and Ekholm. K., 2001. Foreign Direct Investment in Central and Eastern Europe: employment effects in the EU, *CEPR Working Paper*, 3052.
- Breuss F., 2001. Macroeconomic effects of EU Enlargement for old and new members, *Austrian Institute of Economic Research, Working Papers* 143.
- Breuss, F., and Schebeck, F., 1999. Costs and benefits of EU eastern enlargement for Austria, *Austrian Economic Quarterly*, 1/1999, 43-43.
- Bronfenbrenner, K., 1996. The effects of plant closing or threat of plant closing on the right of workers to organize, Report to Department of Labor, September, 1996, mimeo
- Burke J, and Epstein G. 2001. Threat effects and the internationalization of production, *Political Economy Research Institute Working Papers*; 15
- Crotty, J., 2000. Structural Contradictions of the global neoliberal regime, *Review of Radical Political Economics*, 32(3), 361-68.
- Crotty, J. and Dymski, G., 2000. Can the global neoliberal regime survive victory in Asia? The political economy of the Asian crisis, *Political Economy Research Institute Working Papers*.

- Crotty, J., Epstein, G. and Kelly, P. 1998 Multinational corporations in the neoliberal regime, in Baker D., Epstein G., Pollin R. (Eds), *Globalization and Progressive Economic Policy*, 117-143, (Cambridge: Cambridge University Press).
- Dewatripont, Mathias; Sapir, Andre; Sekkat, Khalid, 1999. *Trade and Jobs in Europe: Much Ado about Nothing?*, (eds.), Oxford and New York: Oxford University Press
- Diwan, I., 2001. Debt as sweat: Labor, financial crises, and the globalization of capital, Mimeo, The World Bank.
- Dollar, D. 1992. Outward-oriented developing economies really do grow more rapidly: evidence from 95 LDCs, 1976-85, *Economic Development and Cultural Change*, 523-544.
- Egger, H., and Egger, P. 2003. Outsourcing and skill-specific employment in a small economy: Austria and the fall of the Iron Curtain. *Oxford Economic Papers*, 55, 625–643.
- Egger, H., and Egger, P. 2005. Labor market effects of outsourcing under industrial interdependence, *International Review of Economics and Finance*, 14, 349-363.
- Egger, P., and Pfaffermayr, M., 2004. Two dimensions of convergence: National and international wage adjustment effects of cross-border outsourcing in Europe, *Review of International Economics*, 12(5), 833-43.
- Egger, P., M. Pfaffermayr and Y. Wolfmayr-Schnitzer 2001 *The International Fragmentation of the Value Added Chain: the Effects of Outsourcing to Eastern Europe on Productivity, Employment and Wages in Austrian Manufacturing*, Study by the Austrian Institute of Economic Research for the Federal Ministry of Economics and Labor, February.
- Egger, P., and Stehrer, R., 2001. *International Outsourcing and the Skill-Specific Wage Bill in Eastern Europe*, The Vienna Institute for International Economic Studies, Working Papers No. 17.
- Epstein, G., 2000. Threat effects and the impact of capital mobility on wages and public finances: developing a research agenda, *Political Economy Research Institute Working Papers*; 7.
- Epstein, G. and Power, D. 2003. Rentier incomes and financial crises: an empirical examination of trends and cycles in some OECD Countries, *Political Economy Research Institute Working Papers*; 57.
- European Commission, 2004. *Employment in Europe*, Chapter 5, *Globalisation and Labour Markets: a European perspective*
- Falk, M. and Wolfmayr, Y., 2005. The impact of international outsourcing on employment: Empirical evidence from EU countries, 2nd Euroframe Conference On Economic Policy Issues In The European Union, June 3, 2005, Vienna.
- Feenstra, R.C., and Hanson, G.H., 1996. Foreign direct investment, outsourcing, and relative wages *National Bureau of Economic Research, Working Paper*, 5121.
- Feenstra R. C.; Hanson G. H. 1999 The impact of outsourcing and high-technology capital on wages: estimates for the United States, 1979-1990, *Quarterly Journal of Economics*, 114 (3), 907-940.
- Fortin, N.M. and Lemieux, T., 1997. Institutional changes and rising wage inequality: is there a linkage? *Journal of Economic Perspectives* 11(2), 75-96.
- Freeman, R., 1998. War of the models: which labor market institutions for the 21st century? *Labour Economics* 5(1), 1-24.
- Freeman, R. and Katz, L., 1991. industrial wage and employment determination in an open economy, in J. Abowd and R. Freeman, (eds.) *Immigration, Trade, and Labor Markets*. Chicago: University of Chicago Press/NBER, 235-259.
- Freeman, R. and A. Revenga 1999, How much has LDC trade affected western job markets? in Dewatripont, M., A. Sapir; K. Sekkat (eds), *Trade and Job in Europe: Much Ado About Nothing?*, Oxford: Oxford University Press, 8-32.
- Galgoczi, B., 2003. The impact of multinational enterprises on the corporate culture and on industrial relations in Hungary, *South-East Europe Review*, ½, 27-44.

- Galgoczi B., Keune, M., and Watt, A., 2005. Relocation: challenges for European trade unions, the European Trade Union Institute Research Department, DP 2005.01
- Gaston, N. and Nelson, D., 2005. Structural change and the labour market effects of globalization, in *Adjusting to Globalization*, ed. Greenaway, D., Blackwell, 45-67.
- Gaston, N., and Trefler, D., 1995. Union wage sensitivity to trade and protection: theory and evidence, *Journal of International Economics*, 39, 1-25.
- Geishecker, I., 2005. Does outsourcing to CEE really threaten manual workers' jobs in Germany?, Workshop on "Relocation of Production and Jobs to CEECs: Who gains and who loses?", Hamburg, 16 - 17 September 2005.
- Geishecker, I. and Holger G. 2003 *Winners and losers: fragmentation, trade and wages revisited*, Deutsches Institut für Wirtschaftsforschung, Berlin, Discussion paper 385
- Glyn, A., 2006. Marx's reserve army of labour is about to go global , *The Guardian*, Wednesday April 5.
- Greenaway, D., R. Hine, and P. Wright 1999a, An empirical assessment of the impact of trade on employment in the United Kingdom, *European Journal of Political Economy* 15, pp. 485-500.
- Greenaway, D., Hine, R., and Wright, P., 1999b. Further evidence on the effect of foreign competition on industry level wages, Centre for Research on Globalisation and Labor Markets, Research Paper 99/11
- Greenaway, D., and Nelson, D., 2001. Globalisation and labour markets: literature review and synthesis, Leverhulme Centre for Research on Globalisation and Economic Policy, Research Paper 2001/29
- Griffin, K. 2003. Economic globalization and institutions of global governance, *Development and Change*, vol. 34, no. 5, 2003, 789-807.
- Grossman, G. and Helpman, E., 1991. *Innovation and Growth in the Global Economy*, MIT Press.
- Guger, A., and Marterbauer, M., 2004. Die langfristige entwicklung der einkommensverteilung in Österreich, Austrian Institute of Economic Research, December.
- Haque, I. 2004. Globalization, neoliberalism, and labour, UNCTAD Discussion Papers, no. 173.
- Harrison, A.E., 2002. Has globalization eroded labor's share? Some cross-country evidence, Mimeo, UC Berkeley.
- Havlik, P., Landesmann, M., Römisch, R., Vidovic, H., and Wörz, J., 2005. The New Member States and Austria: economic developments in the first year of accession, Vienna Institute for International Economic Studies, Research Reports, 318.
- Heijdra B.J., Keuschnigg, C., Kohler, W., 2002. Eastern enlargement of the EU: jobs, investment and welfare in present member countries, Center for Economic Studies & Ifo Institute for Economic Research, Working Paper, 718 (7)
- Helpman, E. and Krugman P. 1985 *Market Structure and Foreign Trade*, MIT Press
- Hijzen, A., 2003. Fragmentation, productivity and relative wages in the UK: A mandated wage approach, Leverhulme Centre for Research on Globalisation and Economic Policy Research paper, 2003/17.
- Hijzen, A., Holger, G., and Hine, R.C., 2004. International outsourcing and the skill structure of labour demand in the United Kingdom, Institute for the Study of Labor, IZA Discussion Paper No. 1249.
- Hofer, H., and Huber, P., 2003. Wage and mobility effects of trade and migration on the Austrian labour market, *Empirica*, 30, 107-25.
- Howell D.R., 2005. *Fighting Unemployment: The Limits of Free Market Orthodoxy*, (ed.) Oxford and New York: Oxford University Press.

- ILO, 2004. A Fair Globalization: Creating Opportunities For All, World Commission on the Social Dimension of Globalization
- Jones, R. W and Kierzkowski, H. 2001. A framework for fragmentation , in Arndt S.W., Kierzkowski, H. (eds.), *Fragmentation: New Production Patterns in the World Economy*, Oxford University Press.
- Katz, L. and Kevin M. (1992). “Changes in Relative Wages, 1963-1987: Supply and Demand Factors”. *Quarterly Journal of Economics*; 107, 35-78.
- Keuschnigg, C., and Kohler, W., 2002. Eastern Enlargement of the EU: how much is it worth for Austria?, *Review of International Economics*, 10(2), 324-42
- Kohler, W., 2001. A specific-factors view on outsourcing, *North American Journal of Economics and Finance*, 12, 31-53.
- Kohler, W., 2004. Aspects of international fragmentation, *Review of International Economics*, 12 (5), 793 – 816.
- Kohler, W., and Keuschnigg, C., 2001. An Incumbent country view on eastern enlargement of the EU, Part II: The Austrian case, *Empirica*, 28, 159–185
- Konings, J. and Vandenbussche, H., 1995. The effect of foreign competition on UK employment and wages: evidence from firm level panel data, *Weltwirtschaftliches Archiv*, 131, 655-672.
- Kratena, K., 2006. International outsourcing and labour with sector-specific human capital, *Austrian Institute of Economic Research Working Papers*, No. 272
- Krugman, P., 1995. Growing world trade: causes and consequences, *Brookings Papers on Economic Activity*, 1, 327–377.
- Kubin, I., and Rosner, P., 2003. Globalisierung und Arbeitsmarkte: Verteilungs- und Beschäftigungswirkungen: Thesen zur theoretischen Literatur, *Wirtschaftspolitische Blätter*, 50(4), 480-90.
- Kucera, D. and Milberg, W., 2002. Trade and the loss of manufacturing jobs in the OECD: new factor content calculations for 1978-1995, *International Institute for Labour Studies, Discussion Paper 135/2002*, ILO, Geneva.
- Leamer, E., 1996. In search of Stolper-Samuelson linkages between international trade and lower wages, in Collins S. M. (ed.), *Imports, Exports and the American Worker*, *Brookings Institution Press*, Washington DC, 141-203.
- Landesmann, M. R. Stehrer and S. Leitner 2001, Trade liberalization and labour markets perspective from OECD Countries, *Vienna Institute for International Economic Studies, Working paper No. 20*.
- Lawrence, R. and Slaughter, M., 1993. International trade and American wages in the 1980s: Giant sucking sound or small hiccup?, *Brookings Papers on Economic Activity*, 2, 161-226.
- Lee, K. and Jayadev, A., 2005. The effects of capital account liberalization on growth and the labor share of income: Reviewing and extending the cross-country evidence, in *Capital Flight and Capital Controls in Developing Countries*, ed. Epstein, G., Edward Elgar.
- Lorentowicz, A., Marin, D., Raubold, A., 2005. Is human capital losing from outsourcing? Evidence for Austria and Poland, presented at the Workshop on “Re-location of production and jobs to CEE countries” Hamburg, September 16-17, 2005.
- Luce, S., 2005. The case for international labour standards: a “Northern” perspective, *Institute of Development Studies, Working Paper 250*
- Marin, D., 2004. A nation of poets and thinkers: Less so with Eastern enlargement? Austria and Germany, *Center for Economic Policy Research Discussion Paper No. 4358*, London.
- Matusz, S., 1994. International trade policy in a model of unemployment and wage differentials, *Canadian Journal of Economics*, 27 (4), 939-49.
- OECD, 2005. *Employment Outlook*, Paris.

- Onaran, Ö. 2004. Life after crisis for labor and capital in the era of neoliberal globalization, Vienna University of Economics & Business Administration, Working Paper Series: Growth and Employment in Europe - Sustainability and Competitiveness, No: 43., 2004.
- Onaran, Ö., Stockhammer, E., 2006. The effect of FDI and foreign trade on sectoral manufacturing industry wages in the Central and Eastern European Countries: A panel data analysis, Vienna University of Economics & Business Administration, Department of Economics Working Paper Series, 94
- Pollin, R., 2002. Globalization and the Transition to Egalitarian Development, Political Economy Research Institute Working Papers, 42.
- Revenge, A.L., 1992. Exporting jobs? The impact of import competition on employment and wages in US manufacturing, *Quarterly Journal of Economics*, 107, (1) 255-284.
- Riker, S.L. and Brainard, D.A., 1997. U.S. Multinationals and competition from low wage countries, National Bureau of Economic Research, Working Papers, 5959
- Rodrik, D., 1997. Has globalization gone too far? Institute for International Economics, Washington DC.
- Rodrik, D., 1998. Capital mobility and labor, mimeo, Harvard University.
- Rodrik, D., 1999. Globalisation and labour, or: if globalisation is a bowl of cherries, why are there so many glum faces around the table? in, Richard E. B., et. al. (eds.), *Market Integration, Regionalism and the Global Economy*, Cambridge: Cambridge University Press and the Centre for Economic Policy Research.
- Rodrik, D. and Rodriguez, F., 2001. Trade policy and economic growth: a sceptic's guide to cross-national evidence, in Bernanke, B., and Rogoff, K. (eds), *Macroeconomics Annual 2000*, MIT Press for NBER, Cambridge, MA.
- Sachs, J. and Schatz, H.J. 1994. Trade and jobs in U.S. manufacturing, *Brookings Papers on Economic Activity* , 1, 1-84.
- Sachs, J. and Warner, A., 1995. Economic reform and the process of global integration, *Brookings Papers on Economic Activity*, 1, 1-118.
- Samuelson, P.A. 2004. Where Ricardo and Mill rebut and confirm arguments of mainstream economists supporting globalization, *Journal of Economic Perspectives*, 18(3), 135-146.
- Slaughter, M.J., 2001. International trade and labor-demand elasticities, *Journal of International Economics*, 54(1), 27-56.
- Stehrer, R., 2004. Can trade explain the sector bias of skill-biased technical change?, Vienna Institute for International Economic Studies, Working paper No. 30.
- Stehrer, R., and Wörz, J., 2006. Attract FDI! – A Universal Golden Rule? Empirical Evidence for Europe and Asia, Vienna Institute for International Economic Studies, mimeo.
- Stockhammer, E., 2004. *The rise of unemployment in Europe: A Keynesian approach*, Cheltenham, U.K. and Northampton, Mass.: Elgar,
- UNCTAD, 1997. *Trade and Development Report*, United Nations, Geneva.
- Went, R., 2000. *Globalization*, International Institute for Research and Education, Amsterdam.
- Winter-Ebmer, R., and Zimmermann, K.F., 1998. East-West trade and migration: The Austro-German Case, Institute for the Study of Labor, IZA DP No. 2
- Wood, A., 1994. *North-South Trade, Employment and Inequality: Changing Fortunes in a Skill-Driven World*. Oxford: Clarendon Press.

ZUSAMMENFASSUNG

Diese Studie untersucht die existierende Literatur zum Einfluss der Globalisierung auf den Arbeitsmarkt und die Einkommensverteilung einerseits zwischen Arbeit und Kapital sowie andererseits innerhalb des Faktors Arbeit (zwischen den diversen Sektoren, aber auch zwischen qualifizierten und unqualifizierten ArbeitnehmerInnen) in den entwickelten Ländern, insbesondere in den alten EU-Ländern, sowie in Österreich.

Zwei Aspekte der Globalisierung werden analysiert: internationaler Handel sowie ausländische Direktinvestitionen (FDI). Die Auswirkungen internationaler Verlagerungen (Outsourcing) werden in diesem Zusammenhang ebenfalls untersucht.

Für die Analyse der Verbindungen zwischen Globalisierung und Arbeitsmarkt wurden drei grundsätzliche Zugänge gewählt: 1. Außenhandelstheorie, 2. Arbeitsökonomie, 3. Politische Ökonomie.

Ausgehend von den Theoremen von Heckscher-Ohlin und Stolper-Samuelson, besagt die traditionelle Außenhandelstheorie, dass in Ländern, die reich an Kapital und an qualifizierten Arbeitskräften sind, die Löhne und die Beschäftigung von niedrig qualifizierten Arbeitskräften oder von Beschäftigten in jenen Sektoren die verstärkter Importkonkurrenz ausgesetzt sind, trotz insgesamt steigender Wohlfahrt sinken können. Hat jedoch bisher das ursprüngliche Stolper-Samuelson-Modell die durch Außenhandel hervorgerufene Umverteilung von Arbeit zu Kapital betont, so hat die handelstheoretischen Diskussion in den letzten Jahrzehnten stärker die Umverteilung innerhalb des Faktors Arbeit in den Mittelpunkt gestellt. Was früher die Feststellung eines unvermeidlichen Verlierers bei Marktöffnungen in der traditionellen Außenhandelstheorie war, ist laut der neuen Außenhandelstheorie vermeidbar, angesichts der signifikanten zusätzlichen Effizienzgewinne durch den Außenhandel infolge steigender Skaleneffekte, technologischer Spillovers, mehr Wettbewerb und größerer Produktvariation (Helpman und Krugman, 1985)

Auf Basis von Faktoranalysen untersuchen arbeitsökonomische Ansätze die Auswirkungen des Außenhandels hinsichtlich der Verschiebung der Arbeitskräftenachfrage in Reaktion auf zum einen die Exporte, welche eine Quelle der Nachfrage sind, und zum anderen in Reaktion auf die Importe, weil diese die Nachfrage mindern (vgl. Katz und Murphy, 1992; Borjas et al., 1992; Wood, 1994). So erhöhen Exporte die Beschäftigung, während Importe diese reduzieren. Aus mikroökonomischer und institutioneller Sicht hingegen, werden durch den Außenhandel nicht nur die Nachfragestrukturen beeinflusst, sondern auch die Lohnverhandlungspositionen: a) einerseits durch niedrigere Renten wegen des verstärkten internationalen Wettbewerbs, b) andererseits durch handelsbedingte technologische Entwicklungen, die negative Effizienzeffekte haben und zu einer Disziplinierung der Arbeitskräfte führen (vgl. Greenaway et al.; 1999a&b). Der Rückgang im gewerkschaftlichen Organisationsgrad in den letzten Jahrzehnten spielt hier mit den Außenhandelseffekten und der Zunahme der Ungleichheit zusammen. (vgl. z.B. Freeman, 1998).

Die polit-ökonomische Literatur geht zunächst von ähnlichen Argumenten aus wie institutionalistische arbeitsökonomische Analysen, betont aber zusätzlich noch, dass die spezifischen Wechselwirkungen neoliberaler Politik und Globalisierung in der gegenwärtigen Zeitperiode zu einer Verschlechterung der Lohnverhandlungsstärke

der ArbeitnehmerInnen führt, nicht nur in Entwicklungsländern, sondern auch in den entwickelten Ländern (vgl. Rodrik, 1997; Crotty et al., 1998; Epstein, 2000). Diese Literatur verweist einerseits auf den größeren Wettbewerbsdruck auf die Unternehmen wegen der Handelsöffnung (was die Arbeitgeber weniger kompromissbereit und aggressiver macht bei den Lohnverhandlungen) und andererseits auf die Droheffekte infolge der Zunahme des internationalen Handels, des Outsourcing und der Investitionsflüsse und der damit verbundenen unterschiedlichen Mobilität von Kapital und Arbeit. Diese negativen Effekte auf die Lohnverhandlungsposition vermischen sich mit nachfrageseitigen Faktoren, die sich einerseits aus der restriktiven Fiskal- und Geldpolitik ergeben, andererseits aus dem Absinken des aggregierten Lohneinkommens, was zu einem Teufelskreis von sinkender aggregierter Nachfrage und niedrigen Beschäftigungszahlen führt.

In der empirischen Literatur finden sich Hinweise, dass Außenhandel - sowohl inter-industrieller Handel mit Niedriglohnländern als auch intra-industrieller Handel mit entwickelten Ländern - zu Arbeitsplatz- und Lohnverlusten führt für jene ArbeitnehmerInnen, die in Bereichen arbeiten, die verstärkter Importkonkurrenz ausgesetzt sind, und im besonderen für niedrig qualifizierte Arbeitskräfte (vgl. Revenga, 1992; Sachs und Shatz, 1994; Greenaway, 1999a; Landesmann et al., 2001). Es gibt jedoch gewichtige Unterschiede bezüglich der geschätzten Größenordnungen dieser Wirkungen. Außerdem gibt es unterschiedliche Reagibilitäten der Beschäftigung und der Löhne in den jeweilig untersuchten Ländern: Das gängigste Argument hierbei ist, dass im Gegensatz zu den USA in Europa nicht die Löhne sondern die Beschäftigung die Anpassungslast tragen müsse. Ausgehend von diesem Argument ist es nur ein Schritt zur Debatte über die verhältnismäßig starken Arbeitnehmerschutzorganisationen in Europa. Die Zeitdimension der negativen Auswirkungen ist ebenfalls unklar: Bei optimistischer Betrachtung geht man davon aus, dass sie mit der Zeit wieder verschwinden, sobald die aus dem Handel resultierenden Wohlfahrtsgewinne zu einem Wirtschaftsaufschwung führen (Bhagwati et al., 2004; OECD, 2005). Eine weitere Front in den Kontroversen ergibt sich dort wo Studien, die den Fokus legen auf die Auswirkungen von Handelsflüssen zur Erklärung von negativen Arbeitsmarkteffekten, von Außenhandelstheoretiker(innen) kritisiert werden, die argumentieren, dass die untersuchten Veränderungen bei Importpreisen und Importmengen nicht groß genug sind um die großen Veränderungen der relativen Löhne erklären zu können und dass technologische Veränderungen der Hauptgrund für das Sinken der (relativen) Löhne bei niedrig qualifizierten Arbeitskräften sind (vgl. Lawrence und Slaughter, 1993). In letzter Zeit hat die wachsende Bedeutung von Importen von Intermediärgütern infolge internationalem Outsourcing zu der einvernehmlichen Interpretation geführt, dass sowohl der Intermediärgüterhandel mit Niedriglohnländern als auch technologische Effekte zu Verschlechterungen des Arbeitsmarkts für niedrig qualifizierte Arbeitskräfte geführt haben (vgl. Feenstra und Hanson, 1999). Weiters wird betont, dass Importpenetration defensive Innovationen stimulieren könnte, d.h. Außenhandel könnte folglich einen indirekten Einfluss auf die Löhne haben (vgl. Stehrer, 2004; Greenaway et al., 1999b). Vor kurzem haben die Kontroversen innerhalb der Handelstheorie eine weitere Dimension erhalten durch den Beitrag von Samuelson (2004), der behauptet, dass, wenn in Ländern in der Ausgangssituation nicht Autarkie herrscht, sondern bereits Handelsbeziehungen bestehen, dann wird eine Produktivitätszunahme des weniger entwickelten Handelspartner in der Exportindustrie des entwickelteren Handelspartners zu einer Verschlechterung der Terms of Trade zulasten des entwickelteren Landes führen. Der Hintergrund dieser

Annahme ist die technologische Aufholjagd Chinas, welche zu sich verschlechternden Terms of Trade für die USA und zu einer permanenten Reduktion im US-amerikanischen realen Pro-Kopf-Einkommen führen könnte, auch wenn weltweit das Einkommen insgesamt steigt.

Ebenso wenig gibt es einen allgemein geteilten Konsens darüber, ob eine Verschlechterung der Arbeitsmarktsituation für die niedrig qualifizierten Arbeitskräfte einhergeht mit einer allgemeinen Verschlechterung der Verhandlungspositionen der Arbeitnehmerseite in den entwickelten Ländern. Obwohl manche AutorInnen, sowohl vom arbeitsökonomischen als auch vom außenhandelstheoretischen Standpunkt aus behaupten, dass es keine allgemeine Tendenz für ein sinkendes durchschnittliche Lohnniveau gibt, sondern nur ein größeres Auseinanderklaffen der Lohnschere (vgl. Krugman, 1995; Lawrence und Slaughter, 1993; Revenga, 1992; Sachs und Shatz, 1994; Feenstra und Hanson, 1996), weisen die meisten arbeitsmarktökonomischen (vgl. Freeman, 1998; Greenaway et al., 1999a&b; Slaughter, 2001) und die politökonomischen Studien (vgl. Rodrik, 1997; Epstein, 2001) darauf hin, dass es wichtig wäre, die Verbindungen zwischen der Globalisierung und der Lohnverhandlungsstärke der ArbeitnehmerInnen zu untersuchen. Dieser Hinweis ist besonders aufschlussreich angesichts der abnehmenden Tendenz der Lohnquote in vielen entwickelten Ländern, einer Tatsache, die vom Großteil der handelstheoretischen Literatur nicht erwähnt wird. Weiters betont eine zunehmende Anzahl von Studien, dass die Disziplinierungs- und Droheffekte der Globalisierung gegenüber den ArbeitnehmerInnen sich nicht unmittelbar in den tatsächlichen Handelsvolumina und den Kapitalflüssen widerspiegeln und daher einer direkten qualitativen Beurteilung bedürfen.

Bezüglich Österreich können die empirischen Ergebnisse über die arbeitsmarktbezogenen Auswirkungen der Globalisierung folgendermaßen zusammengefasst werden: Was die Auswirkungen des Außenhandels (Gesamt-, Endverbrauch und Intermediärgüterhandel) auf die Gesamtbeschäftigung (oder Arbeitslosigkeit) betrifft, so können gar keine oder nur minimale Auswirkungen von Importen gefunden werden (Aiginger et al., 1996; Winter-Ebmer und Zimmermann, 1998; Hofer und Huber, 2003); andererseits gibt es aber einen negativen Effekt für niedrig qualifizierte Arbeitskräfte, ältere ArbeitnehmerInnen und ArbeiterInnen mit Niedriglohn (Aiginger et al., 1996; Hofer und Huber 2003), sowie für die Niedriglohnindustrie und für die Bereiche mit einem AusländerInnen-Anteil (Winter-Ebmer und Zimmermann). Es gibt nur einen sehr kleinen oder insignifikanten Einfluss von Exporten auf die Beschäftigung (Aiginger et al., 1996; Winter-Ebmer und Zimmermann, 1998; Hofer und Huber, 2003). Was Löhne betrifft, so gibt es Hinweise auf einen negativen Effekt der Importe und auf einen geringen positiven Effekt der Exporte (von und nach dem Osten) auf Basis von Individualdaten (Aiginger et al., 1996), und keine Auswirkungen durch Importe aus dem Osten sowie positive Auswirkungen von Exporten in den Rest der Welt auf Branchenbasis (Winter-Ebmer und Zimmermann, 1998). Mobile Arbeitnehmer spüren geringere negative Auswirkungen von Importen auf ihre Löhne und positive Auswirkungen von Exporten (Aiginger et al., 1996).

Es gibt keinen nachweisbaren Einfluss auf die Gehälter von Angestellten, jedoch sehr wohl einen positiven Export- und negativen Import-Effekt auf die Löhne von ArbeiterInnen (Hofer und Huber). Was die relative Beschäftigung zwischen hoch qualifizierten und niedrig qualifizierten Arbeitskräften betrifft, so sind positive Auswirkungen durch Exporte und negative Auswirkungen durch Importe (mit

Ausnahme des Outsourcings nach Osteuropa) festzustellen (Egger und Egger, 2003). Outsourcing in die Mittel- und Osteuropäischen Länder (MOEL) führte zwar zu einer Steigerung der relativen Beschäftigung und der Löhne der hochqualifizierten Arbeitnehmer im Vergleich zu den niedrig qualifizierten Arbeitnehmern (Egger und Egger, 2003; Egger et al. 2001), gleichzeitig gibt es aber auch ein umstrittenes Untersuchungsergebnis, das einen negativen Effekt des gesamten Outsourcings auf die relative Beschäftigung und die relativen Löhne der hoch qualifizierten Arbeitnehmer belegt. Dies kann als Hinweis gewertet werden, dass Österreich ein Land mit knapper Ausstattung an Humankapital ist (Lorentowicz et al., 2005; Marin 2004)). Es deutet Einiges darauf hin, dass die MOEL –Filialen multinationaler Firmen aus Österreich komplementär zu österreichischen Firmen sind (Marin, 2004) und es keine nachteiligen Einflüsse gibt von den Gehältern der MOEL-Tochtergesellschaften auf die Beschäftigung in den Muttergesellschaften; Hingegen finden Bellak und Altzinger (2001) einen negativen Effekt der Umsätze der MOEL-Tochtergesellschaften auf die Beschäftigung in den Muttergesellschaften. Dieses Ergebnis ist im Gegensatz zu Marin (2004), die keinen Einfluss gefunden hat. Simulationsergebnisse über die Auswirkungen der Osterweiterung oder des Handels mit MOE-Ländern deuten einerseits auf eine leichte Verschiebung der funktionellen Einkommensverteilung zu Lasten der Lohnabhängigen und zu Gunsten der Arbeitgeber hin (Breuss und Schebeck, 1999), andererseits auf einen negativen Effekt sowohl von Finalgüterhandel als auch von Outsourcing nach Osteuropa auf niedrig qualifizierte Arbeitskräfte; weiters einen negativen Effekt des Fertigwarenhandels auf die Löhne qualifizierter ArbeitnehmerInnen in den von verstärkter Importkonkurrenz betroffenen Branchen und weiters einen positiven Effekt von Outsourcing auf die Löhne qualifizierter Arbeitskräfte insgesamt (Kratena, 2006). Zu guter Letzt gibt es aber noch ein anderes Resultat, das auf ein Sinken der relativen Löhne von qualifizierten und unqualifizierten Arbeitskräften hinweist (Keuschnigg und Kohler, 2002).

Alles in Allem bietet die empirische Literatur über Europa und die USA Hinweise darauf, dass Handel negative Auswirkungen hat auf den Arbeitsmarkt in jenen Branchen, die einer Importkonkurrenz ausgesetzt sind, und besonders auf die niedrig qualifizierten Arbeitskräfte, sei es durch direkte Effekte oder indirekt durch handelsbedingte technologische Effekte.

Unabhängig von den großen Unterschieden der diversen theoretischen Zugänge sind sich alle einig darüber, dass niedrig qualifizierte Arbeitskräfte diesen negativen Auswirkungen stärker ausgeliefert sind als qualifizierte Arbeitskräfte. Nicht entschieden ist aber die Frage, ob diese schlechtere Position der niedrig qualifizierten gegenüber den qualifizierten ArbeitnehmerInnen nur ein relativer oder ein absoluter Nachteil ist. Weiters bleibt es eine empirisch zu beantwortende Frage, ob die Lohn- oder Beschäftigungszuwächse der qualifizierten Arbeitskräfte ausreichen um ihren Anteil an der Wertschöpfung zu erhöhen, oder ob die Einkommensverteilung zwischen qualifizierter Arbeit und Kapital sich verschlechtert aufgrund von Produktivitätszuwachsen. Letztlich bestimmen die Veränderungen der Anteile von qualifizierter und unqualifizierter Arbeit am Volkseinkommen das Resultat hinsichtlich der funktionellen Einkommensverteilung zwischen Arbeit und Kapital.

Im Falle der europäischen Länder, wo Anpassungen meist nur über die Beschäftigung erfolgen, ist es notwendig zur Analyse der Einkommensverteilung sowohl die lohnbezogenen als auch die arbeitsmarktbezogenen Auswirkungen zu untersuchen. Die Kombination von Lohn-, Arbeitsmarkt- und Produktivitätsentwicklung

ermöglicht letztlich die Ermittlung des Lohnanteils an der Wertschöpfung in einem Sektor. Eine erschöpfende Analyse der verteilungsbeeinflussenden Wirkungen der Globalisierung hat daher mehrere Dimensionen: Die Entwicklung der Löhne und der Beschäftigung, sowie der Anteil der Löhne von unqualifizierten und qualifizierten ArbeitnehmerInnen an der Wertschöpfung sowohl für den betreffenden Sektor als auch auf aggregiertem Niveau.

Eine weitere interessante Entdeckung, die in der Literatur zu finden ist, ist die Tatsache, dass die negativen Handelsauswirkungen nicht nur auf den inter-industriellen Handel mit Niedriglohnländern zurückzuführen sind, sondern auch auf intra-industriellen Handel mit entwickelten Ländern. Die Untersuchungsergebnisse weisen diesbezüglich aber signifikante Heterogenität auf und zeigen, dass die Zusammensetzung und die Herkunft der jeweiligen Importe berücksichtigt werden müssen. Ebenfalls uneinheitlich sind die Ergebnisse für die diversen Branchen. Daher ist es wichtig hier zwischen den importierten Intermediärgütern und den Fertiggütern zu unterscheiden, sowie deren Herkunftsländer (Niedriglohn- versus Hochlohnländer, bzw. sog. „Aufhol-Länder“ versus andere Entwicklungsländer und entwickelte Länder) und nicht zuletzt den unterschiedlichen Qualifikationsgruppen in den Sektoren (d.h. hochqualifizierte, qualifizierte und niedrigqualifizierte).

Die Auswirkungen von Kapitalflüssen werden meist in Firmenstudien analysiert, wobei jedoch eine Beurteilung der Auswirkungen des Foreign Direct Investment-(FDI-) Abfluss auf die Löhne und auf die Beschäftigung je nach Branche eine wichtige (relevante) Ergänzung der Studien zu Handels- und Outsourcing-Einflüssen sind. Man kann dadurch die Droheffekte untersuchen, sofern sie FDI-Strömen enthalten sind.

Sollte sich letztlich herausstellen, dass Handel oder Kapitalmobilität einen Einfluss haben auf die Elastizität der Arbeitskräftenachfrage und auf die Lohnverhandlungsstärke der ArbeitnehmerInnen, so führt dies nicht nur zu einer Verschiebung im Arbeitskräftebedarf oder in der Lohnverhandlungskurve, sondern es verändert auch die Reagibilität der Beschäftigung auf Produktion und Löhne sowie jene der Löhne auf Produktivität und Arbeitslosigkeit. Viele Studien kommen zu dem Schluss, dass die Außenöffnung sich auf den Arbeitsmarkt viel stärker auswirkt als es allein die bloßen Zahlen vermuten lassen, und sie einher geht mit einer allgemeinen Verschiebung der Kräfteverhältnisse bei den Lohnverhandlungen und der Arbeitskräftenachfrage in Zeiten von harter Konkurrenz und hoher Kapitalmobilität. Daher ist es im Grunde nicht die Marktöffnung an sich, sondern sind es die Bedingungen unter denen sie stattfindet – d.h. die Verschiebung der Kräfteverhältnisse als Folge der Außenöffnung, die dem Faktor Arbeit schaden. Wenn dies so ist, sollte die Wirtschaftspolitik dieser Frage mehr Aufmerksamkeit widmen.

Die wirtschaftspolitische Diskussion über die Auswirkungen der Globalisierung auf den Arbeitsmarkt kann als ein weites Spektrum an Ansichten mit zwei Extrempositionen gesehen werden, welche die Unterschiede der theoretischen Zugänge am besten charakterisieren: Auf der einen Seite findet man hauptsächlich die Forderung des ökonomischen Mainstreams nach weiteren Arbeitsmarktderegulierungen sowie nach Methoden um die Lohnflexibilität und die Mobilität niedrigqualifizierter Arbeitskräfte zu erhöhen (z.B. OECD, 2005). Auf der anderen Seite findet man politökonomische Auffassungen, die einerseits den Nachdruck legen auf die Rolle der Industriepolitik bei der Förderung von Investitionen und bei der Unterstützung des Arbeitsplatzbeschaffungspotenzials der

Wirtschaft, andererseits auf die Koordination von makroökonomischer Politik, sowie auf die notwendige Zusammenarbeit der Lohnabhängigen zur Verhinderung des destruktiven Wettbewerbs zwischen den Arbeiter(inne)n der einzelnen Länder.

Um die angemessenen wirtschaftspolitischen Instrumente ermitteln zu können, wird es notwendig sein, alle möglichen Kanäle aufzuzeigen, durch die Handel und Kapitalflüsse den Faktor Arbeit beeinflussen können. Wenn die gegenwärtige Form der Globalisierung arbeitsdisziplinierende Wirkung hat bzw. die Schaffung neuer Arbeitsplätze bei einem gegebenen Outputniveau reduziert, dann würde eine weitere Arbeitsmarktflexibilisierung dieses Problem noch verstärken anstelle es zu lösen. Die Betonung der Arbeitsmarktflexibilisierung für unqualifizierte Arbeitnehmer seitens des ökonomischen Mainstreams scheint implizit dramatische Lohneinbußen für diese Arbeitnehmergruppe zu akzeptieren, ohne die sozialen Konsequenzen und die massive Einkommensumverteilung zwischen Arbeit und Kapital in Betracht zu ziehen. Wenn Globalisierung tatsächlich signifikante Auswirkungen auf die Löhne hat - seien es nun die Löhne qualifizierter oder unqualifizierter ArbeitnehmerInnen, dann muss eine auf sozialen Konsens ausgerichtete Politik notwendigerweise eine Evaluierung der Veränderungen in der Lohnverhandlungsstärke von Arbeit und Kapital vornehmen.