

## **ECONOMIC POLICY CHALLENGES OF GAINS FROM TRADE - THE CASE OF AUSTRIA**

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### **ABSTRACT**

After EU accession of Austria, productivity of labor grew continuously, and exports soared. Wages, however, grew only moderately, and wages of low-income groups, in particular of men, fell substantially. We argue that the gains from trade, FDI and the increasing share of foreign ownership in the production sector had negative effects on wage earners.

The Austrian tax- and social security system, while seeking to mitigate this development, turns out to aggravate inequalities. At the end of the day, it is reducing both the quantity and quality of labor supply. The trends towards part-time employment and immigration of low-skilled workers should not be viewed as an exogenous challenge to the welfare state that has to be tackled by higher transfers, but rather as a consequence produced by an inefficient tax and transfer system.

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Gains from economic integration and trade specialization and their consequences on income distribution pose specific challenges to tax and social policies. We highlight the related issues with respect to the case of Austria, but it is important to note that the problem area is not restricted to Austria.

The share of wages in GDP has declined in most OECD countries during the last 20 years. That corresponds to the findings that the share of rentier income in GDP increased (Abrena, Epstein and Power, 2003), as did the share of profits (Ellis and Smith, 2007). Simultaneously a tendency towards more earnings inequality could be observed (Daly and Valletta, 2008; Shapiro, 2005). While some authors attribute the fall in the labour share or the upward profit share to technological change (Ellis and Smith, 2007) or to privatization (Azmat, Manning and Van Reenen, 2007) we argue that one also has to look at the effects of gains from trade and the increasing share of foreign ownership in the production sector. Haufler, Klemm and Schjelderup (2008) find that profit taxation falls when a rising share of capital is employed in multinational firms. Only few scholars rather concerned with South-North or South-South trade relations (Gourdon, 2007) attribute the observed phenomena to trade liberalization or gains from trade specialization, despite (or possibly because of?) the fact the consequences of the “doctrine of comparative advantage” on factor incomes are well specified in text books. The scarce factor of production (labor) will lose and the less scarce factor (capital) will win. To alleviate the social consequences Stolper and Samuelson (Samuelson, 1962) suggest that capital taxation should be increased in that case.

Next, we briefly describe the main characteristics of Austrian economic development since the early 1990s, most notably since its accession to the EU in 1994. After that we briefly refer to the possible distributional effects of gains from trade, and finally we deal with the social and tax policy responses of Austrian politics, which unfortunately added to the problem.

## **AUSTRIA’S ECONOMIC DEVELOPMENT AFTER EU ACCESSION**

Since EU accession in 1994 Austria's openness to trade changes dramatically. Total merchandise and service exports increased from 34.9 % of GDP in 1995 to 59.6 % in 2007. Imports grew slightly less. Their share in GDP increased from 35.8 % in 1995 to 53.7 % in 2007. This is the outcome of redirected trade flows and a new international organization of production that should lead to gains from trade according to David Ricardo's doctrine of comparative advantage. Between 1980 and 1994 the export/GDP and import/GDP ratios reported for merchandise and service trade did not change much. Dramatic change only happened after the fall of communist power in Eastern Europe, Austria's accession to the European Union and to the Euro Zone. These changes offered extraordinary opportunities for a new design of international specialization of production within an area of about 500 km beyond the northern, eastern and southern borders of Austria.

We, of course, can also observe the phenomena predicted by Stolper and Samuelson (Samuelson, 1962): relative wages fall and profits increase. In the period 1995-2005 productivity per worker increased by 18 %, but gross wages increased by only 3.3 %, net wages even worse by a mere 0.5 %. While consumer prices increased by 18.5 % (Kalliauer and Peischer, 2005), consumption of private households fell from 54.0 % of GDP to 53.3 % in 2005, and further to 51.7 % in 2007. Despite of an increase in non-wage incomes, notably profits, investing in Austria became less attractive. Investment also fell from 24.8 % of GDP in 1995 to 22.7 % in 2005 (22.8 % in 2007). The reason of the fall in the investment share is a consequence of the shift in the functional income distribution. Due to the adverse development of wage incomes, domestic consumption and investment does not contribute much to GDP growth, while soaring exports (almost 70 % growth during 2000-2007) cannot compensate as a demand factor of for the real income decline. Thus, the current account turned dramatically from a 5.1 bn Euro deficit in 1995 to a surplus of 4.9 bn Euro in 2005 and further to 8.6 bn Euro in 2007. This is the highest surplus on current account ever recorded.

Since exports were the only source of growth, Austria clearly remains behind its Eastern neighbors, but also behind UK and USA in terms of cumulated economic growth. For 1994-2005 Austria reports average annual growth of about 2.2 %, somewhat higher than growth in Germany and Italy (1.4 % each), but lower than Poland (5.2 %), Hungary (3.8 %), USA (3.2 %) and UK (2.8 %). Wage earners did not much participate in the modest growth of Austria. Only in Poland (-8.6 %) and Hungary (-7.4 %), where economic growth was much faster, the share of wages in GDP fell nearly as strong as in Austria (from 1994 to 2006 by 8.7 percentage points, i.e. -0.72 % per year).

Thus, we note the expected picture. Austria gained from trade, but wage earners lost from trade.

### **EFFECTS OF FOREIGN DIRECT INVESTMENT**

Since a large part of trade specialization takes place within the networks of large multinational corporations the relevance of Ricardo's doctrine of comparative advantage has changed from the exchange of finished goods to the exchange of parts and components, i.e. intra-industry trade. As Krugman (1991) has put it in his 'new economic geography', organizational, marketing and technological know-how foster specialization effects and returns to scale from the international organization of production. This is indeed applicable to Austrian economic development. Since the fall of communist power Austrian firms and banks as a group have become the largest foreign direct investors into East Central Europe (Haiss, Pichler and Steiner, 2007; Haiss, Steiner and Eller, 2008).

While in the initial phase these foreign direct investments contributed positively to economic growth (Altzinger 2006) over the years, as the share of FDI in the respective economies turned larger, the overall effects became weaker and finally seemed to have turned to the negative (Eller, Haiss and Steiner 2006). That is not a big surprise, since FDI in general and mergers and acquisitions, in particular, hardly contribute to economic growth. These insights are supported by micro views and macro views (Haiss and Roessl, 2008; Pichler, Steiner, Fink and Haiss, 2008).

As Fink and Holden (2008) put it: 'At least since Michael Porter's (1987) article in the Harvard Business Review managers and scholars alike should know that cross-border acquisitions are overly risky (ad)ventures. The promises of charismatic or less charismatic leaders to 'create value' by large acquisitions everywhere in the world were not met and still are not met, as numerous publications suggest to those who want to know (Barnes, 1984; Gregory, 1997; Lessard, 1995; Limmack, 1991; Pettway and Yamada, 1986; Meschi and Metais, 2006). Irrespective of persistent failures, during the last 10 years foreign direct investment reached unprecedented levels, specifically among developed economies and across the Atlantic Ocean. That raises serious doubts as to whether strategic management is on the right track and whether top managers of large corporations have any interest in maintaining corporations as socially viable systems that could possibly also contribute to welfare increase in capital exporting and importing countries. With interest we note that a number of critical papers is finding their way into the top journals (Probst and Raisch, 2005; Toh and DeNisi, 2005; Rossetti and Choi, 2005)

indicating the need to explore deeper into the motives and reasons of failure of foreign direct investment activities.’ What was found in the management literature within the last 20 years does not deviate from long term analysis. In a century of corporate takeovers the only group that gained from acquisitions is the shareholders of acquired firms (Martynova and Renneboog, 2008).

Perhaps, the reportedly growing returns on capital invested in Austrian FDI in Central and Eastern Europe (OeNB 2008, p. 14) could at least partly be attributed to the extra profits of Austrian banks from the Euro loans extended to local customers in CEE, but also to the relocation threat. Low mobility of workers across sectors may allow internationalizing firms more easily to employ the relocation threat in wage negotiations (Resch and Haiss, 2007; Seguino, 2007). Large and internationalized firms create ample opportunity to relocate firm activities among their own subsidiaries in different countries or at different locations within larger countries. As we shall see below, firms may even enforce specialization that lowers productivity in one country and have gains from such an arrangement. That may have contributed to some decline in the productivity effects of FDI: Pieper (2000) found that in a number of middle income developing countries median productivity growth slowed down from the 1970s to the early 1990s, although (or because?) in the same period inward FDI into developing countries grew significantly.

## **GAINS FROM TRADE: COMPARATIVE ADVANTAGE**

According to Ricardo’s doctrine of comparative advantage (Viner, 1937, p. 442) gains from international specialization can be achieved when a country (or a firm, or a foreign subsidiary) with superior labor productivity specializes in the production of those goods, parts, or components where the positive productivity gap in comparison with another country (or firm, or foreign subsidiary) is larger than in the production of other goods. The inferior country (or firm, or subsidiary) would specialize in the production of those goods, where the productivity gap is smaller. For numerical examples see Fink (2009).

If both countries (firms, or subsidiaries) specialize in a good where their own productivity in a within country comparison is higher (within the country the absolute level of productivity is higher in the production of the respective good of specialization), then both countries experience an increase in labor productivity. If in the inferior country productivity in production of the second good is lower, than the specialization leads to a decline of average productivity

in the inferior country (that may apply to Pieper, 2000, see above), but nevertheless the aggregate (global) specialization effect remains positive. Thus, issues of income distribution between the countries (or corporations) involved emerge. The first country (or firm) may win and the other may lose.

In all cases aggregate productivity is increasing. This is the global welfare effect. But, yet another issue is emerging. If the gains from trade are achieved within the consumer goods sector, a global increase in labor productivity of consumer good production is the outcome. If wages and prices remain constant (and are not increased according to the gain in labor productivity) wages are not sufficient to purchase the consumer goods. The first round effects of gains from trade specialization are oversupply of consumer goods and increased profits. If profits are channeled into credits for consumer goods, and workers are willing and able to turn to credit financing of consumption, then the new setting may work for a while, i.e. until a credit crunch sets an end to that opportunity.

If the oversupply of consumer goods is used by corporations to reduce employment and to exert pressure on wages, the disequilibrium becomes more pronounced. Thus, the only feasible long term strategy is either to reduce the prices of the consumer goods or to increase the wages. However, reality apparently is different, as we note in the introduction to this paper: the share of wages in GDP is decreasing. From the increasing share of profits in GDP it can be concluded that excess capital was cumulated during long years and fed into the global financial system (Fink and Haiss, 2006).

Kono and Love (2007, p. 2) 'argue that ... observed changes in inequality reflect changes in the absolute incomes of lower-income workers. The fact that trade helps some workers but not others in absolute terms, and that governments can influence these outcomes is ... important.'

Keefer and Knack (2002) and Rueda and Pontusson (2005) have shown that 'increased inequality leads to greater political polarization, which can in turn reduce the security of property rights and impede economic growth' (Kono and Love, 2007, p. 2). In order to avoid these negative outcomes Kono and Love suggest that workers must be willing to adjust to new jobs and employers must offer these jobs. Good governments could positively influence the necessary processes by concentrating government spending on (1) education spending, (2) public health spending, (3) public spending on mass transportation, and (4) positive externalities of military spending, if military subsidizes education and offers vocational and technical training that later could be used in the private sector.

This is the point when we again turn to the Austrian economy. What were the tax and social policies pursued during times of extraordinary gains from trade? In Austria, during 1995-2007, the share of wages in GDP fell by 5.5 percentage points, during the same period the current account deficit improved by 6 percentage points of GDP. Large part of this improvement can be attributed to the fall in the wages and productivity increase. However, gains from trade may not be the only cause of falling wages. In the next sections of this paper we turn to the implications of tax and social policy.

### **‘PASSIVATING’ TAX AND SOCIAL POLICIES IN AUSTRIA**

The social security system in Austria strives to insure against a variety of risks in a broad way, but takes little account of negative incentive effects that it produces. Though economic policy is proactive in many spheres, such as fostering Research and Education, supporting startups, insuring exports etc., the long run supply side effects of social and tax-policy exert a negative effect on the long-run development of the Austrian economy.

Major goals of the Austrian welfare state that have always been kept in mind by politicians were (and still are) “social justice” towards poor people, families and women, low unemployment rates, that are reached by reducing participation rates rather than by increasing employment incentives, and an early retirement age (Haiss and Schicklgruber, 1993). Thus, tax and social policy strived towards subsidizing these groups in the face increased international wage competition. The share of transfer incomes of 37% of disposable incomes in Austria is unmatched in the OECD (OECD, 2008). Similarly, the share of social expenditures in GDP (28.5% in 2006) was above the EU average, too.

There is evidence that this policy contributed to slow down growth, and to increase the inequality of incomes. As the spread of wages before taxes has risen, an increasing amount of transfers was generated to compensate for this development at household level (see Guger and Marterbauer, 2007). In total, real wages more or less stagnated for many years in Austria, and poverty seems to become an increasing problem.

While Scandinavian countries have a generous welfare state, too, they limit welfare costs of labor supply effects by implementing an “activating” social policy. It keeps in mind agents’ incentives to work (see Aiginger, et al., 2007). While part-time work is usual for women, “near to full-employment jobs” are favored. Finally, the retirement age is high for both men and women.

In contrast, the social system in Austria can be described as being highly “passivating”. Moral hazard and adverse selection effects are of minor significance when policy instruments are introduced, and labor supply effects of high marginal tax rates seem to have been neglected for a long time. Moreover, the competence to implement social policy instruments is spread over a variety of public institutions, and little coordination takes place.

Thus, pronounced negative incentive effects on labor supply can be identified for a variety of labor market groups, which reduce both quantity and quality of labor supply, leading to decreasing returns in education. More and more women are working in part-time jobs only, and the share of people that is actively contributing to the costs of government expenditures is falling. The age of retirement could not be increased despite of an effort to reform the pension system in 2004. Only two years after its introduction, pension reform has been foiled.

The highest costs of this regime arise in opportunity costs, or in terms of foregone income. Real wages have stopped to grow for nearly two decades, and poverty, though intensively battled against by many measures, is becoming an increasing problem. To summarize, the negative effects of gains from trade on real wages were amplified instead of mitigated for most labor market groups by social and tax policy in Austria.

There are several policy fields that exert a negative impact on labor supply: taxation of income, old age pension policy, family policy, minimum incomes policy etc. In what follows, we concentrate on the system of taxation and the pension system.

## **TAX POLICY AND CONTRIBUTIONS TO THE SOCIAL SECURITY SYSTEM**

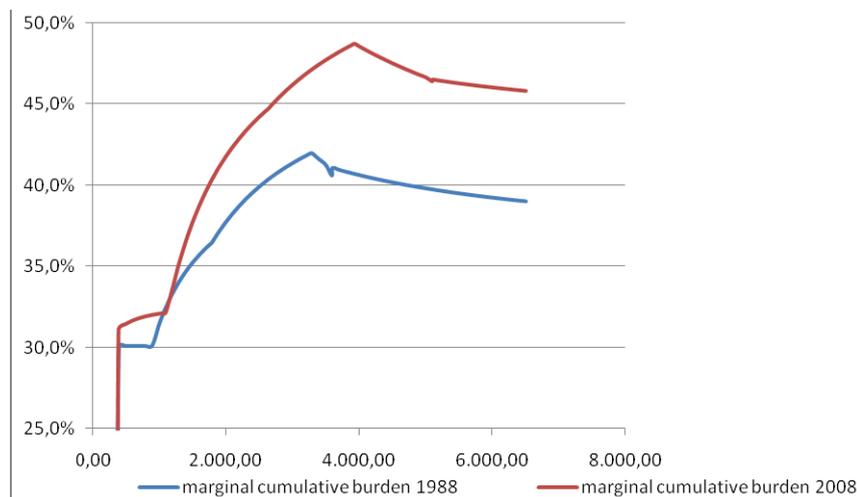
In Austria, the social security system is compelling for most people (only about 1% of the population is not included). Contributions are proportional to income up to a maximum assessment base. Lacking the choice whether to insure or not, and taking account of the weak link between contributions and expected returns, contributions are perceived as being equivalent to taxes from an individual point of view. In what follows, this section is mostly dealing with the aggregate burden of the tax and the social security system (“cumulative taxes”).

Since the 1980s a series of tax reforms have raised the level of tax-free income. In 2008, an employed worker did not pay taxes up to a monthly income of about 1,400 € but only for social security. Therefore, her marginal cumulative tax rate is moderate. Beyond this limit, an agent is faced with substantial marginal cumulative tax rates. These rates, however, are falling for incomes above € 4,000 per month (the maximum base for social security contributions is reached). In addition, interest rates and capital gains are in a preferred position and usually taxed at lower marginal tax rates.

To sum up, during the last two decades, tax reforms have shifted the highest cumulative burden on lower middle and middle incomes, whereas low incomes as well as higher incomes and capital gains are taxed to a lesser degree. In spite of the fact that social security contributions are similar to taxes from the agents' point of view, public charges have not been coordinated, resulting in a taxation of different levels of income that can neither be justified on grounds of fairness nor efficiency.

Figure 1 shows the share of total cumulative burden on gross income (including all components of social security contributions) as a function of gross income.

In Austria, employees usually do not observe total gross income, but a sum they find on their pay slip every month. It differs from total gross income in two respects. Firstly, employers' contributions to the social security system are not visible to employees.



Sources: Hauptverband der österreichischen Sozialversicherungsträger, Ministry of Finance.

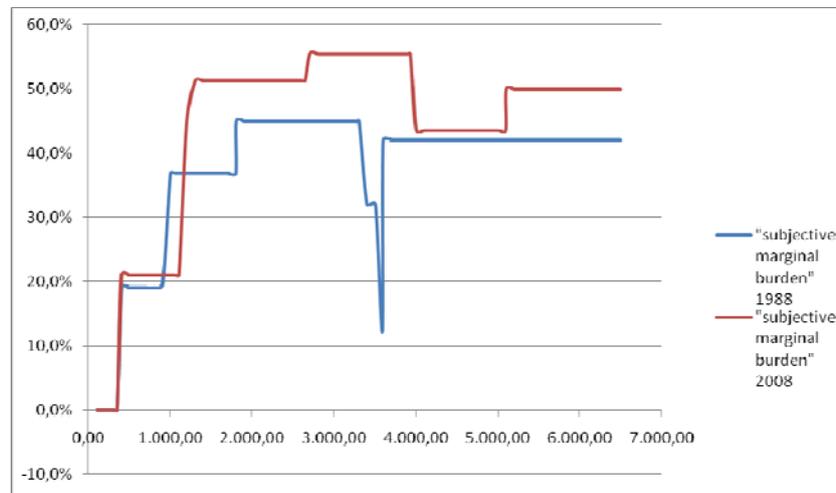
Figure 1. Share of marginal cumulative burden (taxes and contributions to social security) in total gross income as a function of monthly gross income in Euro.

Secondly, one sixth of annual income is taxed at 6% and paid out separately. Thus, visible monthly income before workers' social security contributions and taxes corresponds to 1/14 of annual gross income minus employers' social security contributions.

Correspondingly, figure 2 shows the marginal cumulative tax rate from workers' point of view. It is exactly this rate that mostly enters labor market decisions.

The message of Figure 2 is similar to that of Figure 1, but it is more important from the agents' point of view, and more definite.

We find that low income earners are heavily subsidized, since social security contributions do not cover the expected costs, and income taxes are not paid at all. Claims to the social security systems are substantial. In Austria, more or less everybody gets free access to the health care system and a minimum pension during retirement. In addition, many people in this income group have access to a variety of monetary transfers and benefits for public services.



Sources: Hauptverband der österreichischen Sozialversicherungsträger, Ministry of Finance.

Figure 2. Share of marginal cumulative burden (taxes and workers' contributions to social security) in total income (excluding employers' social security contributions) as a function of monthly gross income in Euro.

If income is increased beyond a well defined benchmark (usually around € 1.000-1.200 net income per month), public transfers cannot be claimed any more. In most cases, transfers are withdrawn without loop-in rules. In combination with high marginal tax rates for higher incomes, excessive marginal cumulative tax rates arise.

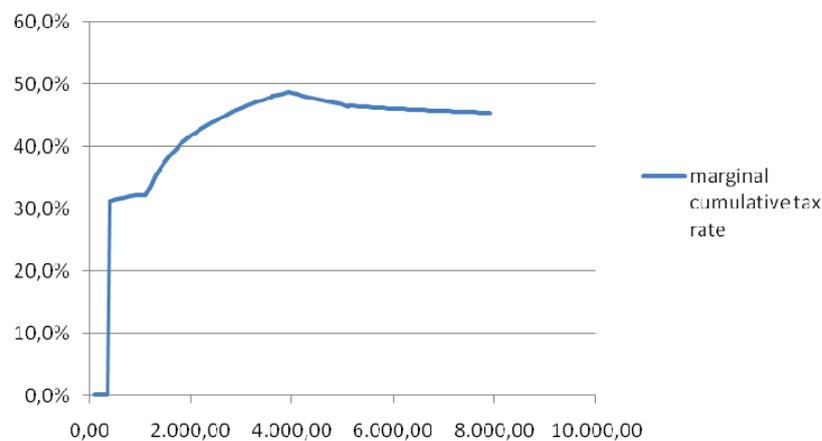
In what follows we give a simple example of the interaction between tax rates, contributions to the social security system, and family policy. In order to foster fertility rates, generous transfers to families are granted in Austria (see BMWFJ, 2009). While the majority of child transfers are provided independent of income, a variety of transfers is restricted to low incomes (“child allowances”, subsidized rates for Kindergarten, subsidized home help, etc.). Hence, in particular for women with children, transfers are withdrawn if a higher income is earned, leading to marginal tax rates of 80% - 180% (Pichler, 2008a).

The combined effect of the tax- and social security system generates a strong incentive for low and medium income workers to substitute working time by leisure time, and to work only part-time, so that gross income more or less corresponds to net income, and no relevant contributions to the tax and social security systems have to be made. Consequently, the share of part time work of women increased from 20 % in 1990 to 44% in 2008. The share of part time work of men is much lower (8.3 % in 2008), but is increasing significantly, too (Pichler, 2008a). Hence, the low-wage traps of the Austrian tax- and social security system attracted a growing number of people.

Recently, the negative incentive effects of the tax system had to be realized by fiscal policy, and in the light of the economic slowdown, the necessity to disburden middle income groups became apparent. A new tax reform for 2009 has been proposed. It promises to correct for what is called “cold progression”, i.e. the exposition of middle incomes to higher marginal tax rates due to inflation rather than due to increases of real income. Investigating the new tariffs, however, makes clear that stopping cold progression was a minor goal. Instead, for the first time, social security contributions and marginal tax rates have been coordinated (figure 3), and a more consistent taxation of higher income groups could be reached.

Clearly, public authorities in Austria are unhappy with the present solution, since they would favor to increase marginal taxation of high income groups. This, however, is only possible if either the highest marginal tax rate is increased above 50%, or if the exemption of one sixth of income is abandoned. Sooner or later, one will decide for the second possibility.

Finally, the Austrian “Bismarckian” social security system (where contributions to the system constitute the right to claims) has been eroded for a long time, since a high share of taxes is required for financial balance (both in the health and the pension system), and the share of people that does not pay for services is steadily increasing. Hence, the system is developing towards a “Beverage” type, which is financed by taxes rather than contributions, and where the link between contributions and claims is weak.



Sources: Hauptverband der österreichischen Sozialversicherungsträger, Ministry of Finance.

Figure 3. Share of marginal cumulative tax rates in total gross income a function of monthly gross income in Euro, tax reform 2009.

After the tax reform 2009, a further step in this direction will have been made: In the structure of financing the system, any element of insurance payments, like lump-sum contributions to the health system, will have been completely removed. Instead, social security contributions are simply a part of the allover tax burden, where the cumulative burden is simply growing progressively with income. In the long run, this construction will permit to disconnect claims and contributions of agents to a rising degree. In the pension system, this might be a first step towards a system where minimum pensions will be established for everybody.

Finally we come back to the link between tax policy and increased inequality of incomes. The main channel is that high marginal tax rates lead to a low-wage trap, since many agents prefer to work part-time only. The majority of part-time jobs being held by women, firstly the income distribution

between men and women got more unequal. Moreover, the same holds for income distribution of all workers, too. Marterbauer and Guger (2007) have shown that a large share of increasing inequality of incomes in Austria can be attributed to reduced average working hours per employee.

Moreover, part-time employment not only reduced the quantity of labor supply, but also its quality: With increasing returns to human capital investment (Romer, 1986), a lowered degree of utilization reduces expected returns per hour, too. In other words, there are many positions that women will never reach if they work only part-time.

## **PENSION POLICY**

In Austria, pension policy has continuously been used as an instrument to fight unemployment by reducing the labor force, or simply to hold the retirement age low, independent of labor market conditions.

From 1970 to 2007, life expectancy for men grew from about 66 to 76 years, and for women from 74 to 83 years. At the same time, the average time of education increased steadily, too. Nevertheless, the official retirement age has been held constant for men (65 years) and women (60 years). Since early retirement programs were used more frequently, the effective age of retirement significantly fell short of the official retirement age for both men and women. With net replacement ratios of about 90% of income for an average wage earner, and low deductions for early retirement, strong incentives to leave the labor market as soon as possible are present for most people. As a result, the average effective age of retirement came down significantly between 1990 and 2007: For men it fell from 62.7 years (1985-90) to 58.9 years (2002-07), for women from 60.8 years (1985-90) to 57.9 (2002-07) (OECD 2007, frequently requested statistics). In other word, average life time after retirement rose from 4 to 17 years for men and from 14 to 25 years (!) for women.

In 2007, Austria had (together with France) the lowest effective retirement age in the OECD, and it was one of the very few countries where it was falling further. Correspondingly, the public pension system runs into deficits that have to be filled by tax transfers. In 2007, these subsidies amounted to about 1.7% of GDP (see HV, 2008).

While the mandatory pension system meanwhile absorbs about 16% of GDP (2006, see Statistik Austria), there is a broad political agreement that early retirement policy will be prolonged at least until 2013. In fact, the conservative party introduced a pension reform in 2005 with substantial long-

run effects, but it was foiled very soon: The effective age at retirement increased in 2006, but it fell again since then.

In fact, pension reforms, while seeking to increase the average rate of retirement, rather contributed to decrease it further in Austria. On the one hand, steps were decided to make retirement less attractive in the long run. On the other hand, reforms were usually accompanied by transitional solutions for people near the official retirement age, where conditions were determined that lead to an exemption of the new rules. As a result, many people took flight into early retirement, since working longer would have resulted in *lower* pensions indeed.

To give an example, the base for calculating pension claims was increased stepwise from the average income during the last 15 years to the average income of the last 30 years. At the same time, deductions for early retirement were not increased. Hence, people often faced the alternative of a long working life and a low pension on the one hand, or a short working life and a low pension on the other.

Interestingly, Austria seems to be able to afford a pension system that is unmatched in Europe. It is not only very costly in terms of money spent on pensions, but furthermore in terms of reducing the quantity and quality of labor supply. Firstly, lowering the share of active labor market participants between 55 and 65 years dampens average wages since in general, wages are rising with human capital, and hence with age. Secondly, high pensions contribute to a high gap between gross and net wages. This provokes a shift towards poorly paid part-time jobs, and a reduction of qualification of younger workers, too.

Finally, pressure on low wages is increased additionally by immigration policy.

### **IMMIGRATION: NEGATIVE SELF-SELECTION**

While the above arguments hold for the native population, the welfare state also affects quantity and quality of immigrants' labor supply. In particular, it fosters immigration of low skilled migrants.

Today, about 16 % of the population or about 1.4 million people living in Austria are foreign-born. Hence, Austria is – relative to its population size – one of the leading immigrant countries within the EU (Biffel, 2007).

A smaller group of immigrants typically consists of highly qualified migrants from EU-15 member states with high participation rates, low

unemployment rates, and earns high incomes. The larger share of immigrants, however, is characterized by low qualification profiles, high unemployment rates (in particular of men, OECD, 2007), and low participation rates of women. On average, labor market performance of migrants of the first but also of following generations is rather poor.

In Austria, the “negative selection” hypothesis by Borjas (1987; see also Borjas, 1988, 1999) applies. If income distribution in the country of origin is more unequal than in the host country, low-skilled people who perform poorly in the country of origin will have the strongest incentive to migrate. In fact, compared to level in the host country, the Austrian welfare system guarantees a high minimum income level while taxing higher incomes. Upon arrival, immigrants’ labor market performance remains poor, which even holds for the second generation of immigrants.

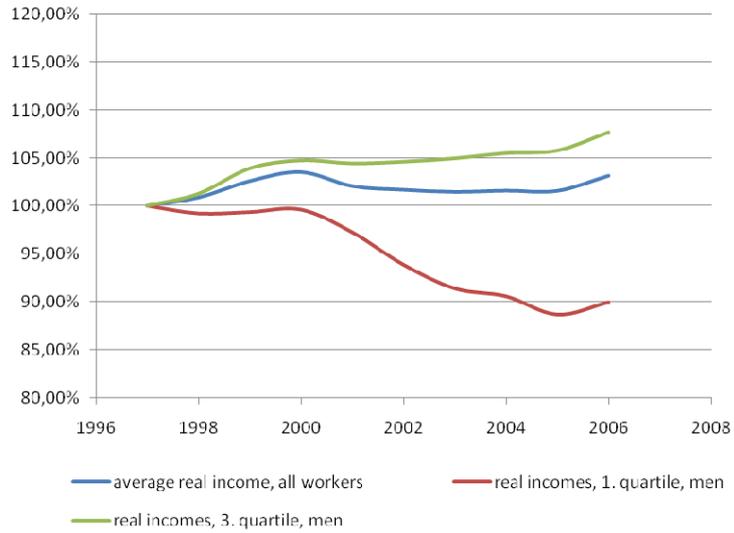
Hence, all criteria of Borjas’ negative selection hypothesis are met. In fact, migrants to Austria have the lowest qualification profile amongst all countries within the OECD (Biffi, 2007, Bock-Schappelwein, 2006). This result corresponds to the finding that the share of public transfers in available income is highest in Austria (OECD 2008), and income distribution is only moderately unequal when compared with other OECD member states.

Additionally, Pichler (2008b) has shown that with the two-stage character of inclusion to the social security system, migrants get a strong incentive to undercut wages. In fact they pay an “entrance fee” to get long-run access to the benefits of the welfare state. Hence, we might expect that the negative impact on wages of native-born low-skilled males will be strongest.

This hypothesis, too, is supported by empirical evidence. Real wages developed poorly since Austria’s access to the European Union. While on average, a stagnation of real incomes can more or less be observed, real wages of men in the lowest quartile dropped by more than 10%, indicating that wage undercutting was present in this part of the labor market (figure 4).

Low participation rates of immigrant women (from Turkey, in particular) and ‘voluntary’ restraint of low income women from full time jobs reduce wage competition among women. Effective working hours of women fell from 34.4 in 1996 to 29.6 per week in 2007, which explains that real wages of women fell during this time span, too. Due to the increasing share of better educated women, however, the average wage per hour increased by more than 20 % in the period 1996-2006. This magnitude surpasses the estimated average productivity increase of labor. By contrast, higher participation rates of immigrant men in combination with an only modest reduction of effective working hours from 39.8 in 1996 to 38.7 in 2007 lead to stronger wage

competition at the lower end of the wage spectrum. During 1997-2006, the average hourly wage of men increased by only 8 %, which is substantially less than the growth of average labor productivity.



Sources: Statistik Austria.

Figure 4. Real wages 1996-2006, all income groups, and 1. and 3. quartile of male incomes, in percent of incomes 1996.

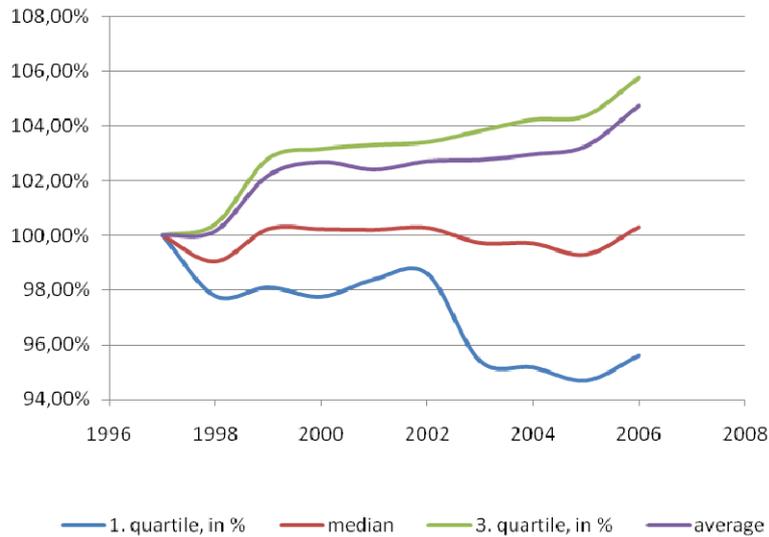


Figure 5. Real wages of women, 1996-2006, in percent of incomes 1996.

### COMBINED EFFECTS ON WAGE INCOME

Three groups of forces affect functional income distribution in Austria:

- (1) *Enhanced gains from trade liberalization* are derived by corporations from (a) reorganization of international production and efficient use of Ricardo's doctrine of comparative advantage, and (b) the practice of the relocation threat in the context of enhanced foreign direct investment, notably in new EU member states and Eastern Europe. Both have a negative effect on wage growth. Total merchandise and service exports grew faster than imports. Its ratio to GDP soared from 34.9 % of GDP in 1995 to 59.6 % in 2007. Outward and inward FDI stocks grew substantially faster than GDP. Their share increased from about 8 % of GDP in 1995 to 34.2 % in 2007. The deficit on current account was turned into a surplus (a shift by 6 percentage points of GDP) and the once negative FDI balance of about minus 30 % of outward FDI stocks is more or less balanced since 2003.
- (2) *High marginal tax rates* when moving from the lowest to the second lowest tax brackets and loss of financial and real transfers keep low income people in a low-wage trap. This holds in particular for women.

Tax free income at the lowest level (monthly €1,200 and less) and numerous real and monetary transfers mitigate the amount of absolute poverty in Austria. But, while keeping the distribution of net incomes relatively constant at a high price, distribution of gross incomes becomes more unequal, as labor time is substituted by leisure time by many labor market groups. This has a negative impact both on the quantity and quality of labor supply. For many of those people, a modest increase in gross income is not sustainable, because that triggers a substantial loss in available income, as taxes soar and social benefits are cut.

- (3) *Negative self-selection effects of migration.* By subsidizing low incomes and taxing higher wages, the Austrian welfare state mainly attracts poorly qualified migrants from low per capita GDP countries, where income is more unequally distributed. For the unqualified, the comparison between incomes at home and in the host countries shows the largest returns to migration. Following Borjas' (1988) "negative selection hypothesis", the labor market performance of this type of immigrants remains poor in the host country, where they typically end up in low-wage jobs. Moreover, the two-stage character of full inclusion into the welfare state provides a strong incentive for wage dumping, and immigrants apparently are willing and interested to undercut even the lowest wages (Pichler, 2008b) in order to get access to social aid.

The combined effect is that low income men bear the largest burden of the negative adjustment cost. Since 1967 the gross wage of the lower quartile male wage earner fell by more than 10 %, while the median gross wage increased moderately.

For women, the combined effect is different. Immigrant women, while being very poorly qualified, are characterized by a low participation rate. Hence, this worsening of the qualification of the female population due to immigration is not mirrored in the income distribution. The lower quartile of real wage fell by 5 %. Since the number of hours worked fell even more, in contrast to male incomes, real wages per hours increased for women even in the lowest quartile. Further, it is important to note that the average gross wage of women increased almost as much as the 3<sup>rd</sup> quartile of gross wage, namely by about 5 %. That implies that the top women incomes in the upper decile must have grown even faster.

However, the average real wage of men and women increased by only about 3 % throughout the period since 1996. As mentioned in the introduction to this article, this is substantially less than the increase in labor productivity of about 18 %.

If in the years to come Austrian governments will not be willing to change the policy path, the gap between consumer goods production and effective consumer goods demand will be widening dramatically. In addition, the financial contributions to the welfare system (child care, health care, old age pensions), which are largely paid by the wage earners, will not suffice the demands on the system.

Findings of others and our own analyses are summarized in Figure 6: Three factors exert pressure on wages: Gains from trade specialization (comparative advantage), wage competition caused by immigration; and the relocation threat of internationally active corporations. While in this case in the literature on international trade it is recommended to increase taxes on profits and to lower taxes on wages, depending on political preferences of governments in power this is not necessarily the case everywhere. In the case of Austria, higher taxes on wages and lower taxes on profits and rentier income plus social policy specifics push low wage earners into a poverty trap, from which it is difficult to escape.

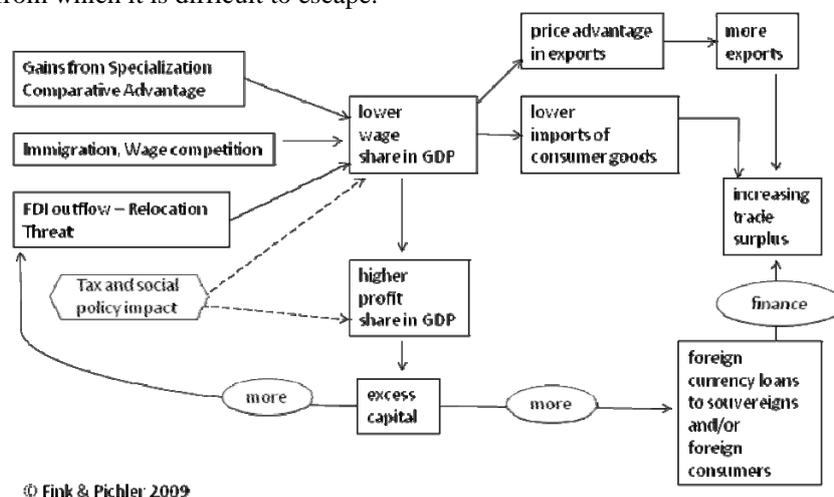


Figure 6. Gains from Trade, Wage Suppression and Financial Flows in Austria.

Modest wage increases above the poverty line are accompanied by higher losses in real and monetary transfers. Thus, Austrian tax and social policies

tend to reduce labor supply and to keep a growing number of people in low income categories. All effects together largely explain the declining share of wages in GDP.

Correspondingly, the share of profits and rentier income in GDP is growing, but taxation was reduced from 8.8 % in 1996 to 7.1 % in 2006. By contrast, average taxation of falling wages is higher and was further increased from 12.3 % in 1996 to 14.5 % in 2006 (Calculations based on data provided by Statistik Austria). Excess capital, which is not invested domestically, is either channeled into more foreign direct investment (the stock of outward FDI multiplied from 8 bn Euro in 1995 to about 165 bn Euro in 2007; OeNB, 2008) or into loans for foreign consumers and sovereigns. Credits and foreign loans increased from about 20 bn Euro in 1995 to 100 bn Euro in 2007, of which 65 bn denominated in Euro (OeNB Daten 2009). These capital exports, and the Euro credits in particular, largely finance the Austrian trade surplus with the CEE region, but also contribute to the increase in the country risk of Eastern EU member states like Bulgaria, Hungary, Latvia, Romania, etc., and new member candidates like Croatia (cf. Fink, Haiss, Öberseder, and Rainer 2007; Fink, Haiss, and Paripovic 2009).

The following observations let us suspect that a similar economic loop may hold for many more countries than Austria:

- (a) Falling interest rates within the EU region since the early 1990s (from about 10-15% p.a. to about 2-5% after the year 2000); we observe a similar but less pronounced trend also in the USA.
- (b) Soaring foreign direct investment (in many instances with no significant effect on economic growth).
- (c) Soaring, but globally imbalanced financial flows.

Since these observations are made parallel to the observation of falling shares of wages in a large number of OECD countries, we cannot exclude that globally falling wages could be the ultimate cause of the global financial crisis. Excess capital lead to extremely low interest rates, but gains from trade specialization in consumer goods production were not passed on to consumers, i.e. the wage earners. For a relatively long time excess capital could be channeled into bubble creating financial activities or into loans, which finally could not be repaid by wage earners since relative wages fell continuously in comparison with GDP. Once it came to the day when meeting financial obligations was on the agenda, the economic loop could only collapse.

## **DISCUSSION**

In order to alleviate the negative consequences of gains from trade, Stolper and Samuelson (Samuelson, 1962) suggested that capital taxation should be increased. In this article we could show that contrary to these recommendations Austrian corporations and government tax and social policies put strong pressure on wages, on the one hand by making use of the relocation threat and on the other hand by implementing a social transfer system that keeps low income people in a poverty trap.

With available data, a large number of independent variables and relatively short time series, it is not possible to apply sophisticated econometric techniques or causality tests to simultaneously quantify the impact of the different policies; the more so since marginal tax rates on wages vary widely within small ranges of income change. However, the set of available data is sufficiently good for a thorough qualitative assessment of the pursued policies.

It may be too far reaching to attribute the fall in the share of wages in GDP only to specialization gains from trade and to the relocation threat, but pressure of poorly qualified immigrants on low wage incomes just adds another burden on the low income wage earners.

## **SUMMARY AND CONCLUSIONS**

The core message of our paper is that the effects of gains from trade and of FDI need to be more thoroughly studied in the context of national tax and social policies. Gains from Trade and FDI can have negative effects on (a) the income distribution between developed and developing countries, (b) between labour and capital, and (c) between classes of wage earners.

In addition, the Austrian tax and social security system, while seeking to mitigate negative redistribution effects, turns out to aggravate inequalities by producing adverse incentives. At the end of the day, it is reducing both the quantity and quality of labor supply, and many people get into a low-wage trap. The trends towards part-time employment and immigration of primarily low-skilled workers should not be viewed as an exogenous challenge to the welfare state, that has to be tackled by higher transfers, but rather as a consequence produced by a tax and transfer system that imposes substantial losses of available income on poor people if they earn just a little more gross income than the subsistence level.

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