Taxing Mobile Jobs and People

4.1 INTRODUCTION

Labor markets are in a flux with employment prospects differing across types of jobs and persons. Wage dispersion has increased, and unemployment rates differ across groups. The process creates both winners and losers: top incomes have been growing rapidly, while incomes at the bottom have been growing much less and in some cases even declining. The general perception is that labor markets have become riskier due to structural changes and new forms of jobs. These trends are widely considered a threat to social cohesion, and it is a pertinent question why gains from economic progress are not distributed more fairly. Current policies have failed to ensure that the winners compensate the losers. The main channel through which such compensation can take place is via tax-financed welfare arrangements. However, the very same drivers affecting labor markets also affect the scope for taxation. A difficult policy dilemma arises when the need for social protection increases at the same time as it becomes more difficult and costly to tax-finance such arrangements.

Structural changes in labor markets have numerous causes, in particular globalization and new technologies, but also policy changes. It is difficult, but also less important, to separate the specific sources of change; the net outcome is increasing mobility of jobs and people, affecting both the type and level of risks faced by workers.

Globalization – in its broad meaning of a process driven by both technological changes and policy decisions – has increased the mobility of production and factors of production. In a labor market context, trade and relocation of production may be interpreted as job mobility. If production is relocated to another country or importers crowd out domestic producers, domestic jobs are transformed into foreign jobs, and vice versa when domestic firms increase their market share at home or abroad. On the one hand, this mechanism is the source of gains from trade, but on the other hand, structural changes follow and create new options for some and destroy possibilities for others. At the aggregate level, the implication is that production and employment become more sensitive to domestic cost conditions, including taxes (the 'elasticity' argument). As a consequence, tax-financing may become costlier (more distortionary), putting tax-financed welfare arrangements under pressure.

The mobility of factors of production also involves labor mobility – a key element of the European Single Market. Such mobility allows factors of production – including workers – to relocate to areas that offer better options. This option is mainly available to the better-educated part of the workforce, but it also affects the scope for taxation. Welfare systems come under pressure if those contributing most to tax-financed arrangements – high-income groups – migrate to low-tax countries, while those standing to benefit the most from social protection migrate to high-tax countries. Moreover – as discussed in Chapter 2 – digital mobility loosens the tie between service provision and location, making geographical relocation of production activities less important. These developments also raise questions about tax enforcement and avoidance. Mobility of production and factors of production thus challenges the financial viability of tax-financed welfare arrangements. The political-economy implications of various types of mobility often exceed actual mobility flows, since the potential exit option increases the political power of particular groups of winners, making it more difficult to implement redistributive policies.

Individual risks in the labor market may arise due to the abovementioned mechanisms. New types of jobs – the so-called gig economy – illustrate how the traditional employer-employee link is disrupted, with the worker assuming the role of both boss and worker (self-employed). While the traditional employer-employee relation typically involves some risk diversification, the new forms of jobs shift more risk to the worker. This may be propagated by a higher speed of adjustment and level of risk than seen in the past. However, these developments also allow for more flexibility and possibilities, e.g., self-employment.

In all European countries, welfare state arrangements play an important role, but the extent and structure are different in each. A significant share of resources is allocated and distributed via the public sector, and thus financed by various types of taxes (across the EU28 countries, total tax revenue constitutes about 45 percent of GDP). Taxation thus comes to the fore in this discussion due to its importance for incentives, distribution, and financing of public activities.

Much public debate takes its outset in the premise that taxes harm competitiveness, leading to the corollary that globalization inevitably puts a downward pressure on taxes and hence the possibilities of financing collective welfare arrangements. This view is too simple. The effects of taxation cannot be seen independently of what is financed by taxes. Taxes

EEAG (2020), "Taxing Mobile Jobs and People",
EEAG Report on the European Economy, CESifo, Munich, pp. 70–91.

financing, say, education or day care have different effects on economic performance (increasing labor supply) than taxes financing, say, early retirement (reducing labor supply). Evidence from cross-country comparisons shows that economic performance (e.g., per capita income) is not straightforwardly related to measures of the size of welfare arrangements (public sector).[1] A more detailed analysis of the specific taxes and what they are financing is required to assess the effects of taxes on economic performance.

Taxes finance, among other things, the social safety net. A key design element in the social safety net is the link between entitlements and contributions (tax payments) at the individual level. In the so-called universal welfare model, entitlements are the same for all, independent of individual contributions (sometimes denoted the *Beveridgean model*). This setting corresponds to the classic textbook case, where taxes distort individual incentives because the individual does not see any relation between tax payments and the services or insurance arrangements provided (the *common pool problem*). Obviously, at the aggregate level there is an explicit link, since taxes finance the expenditures following from the social arrangements.

An alternative model ties entitlements to contributions (the *Bismarckian model*). This can be in a zero-one sense where, for instance, the employed have different rights than the non-employed, or a more sophisticated arrangement, with entitlements dependent on income, as is the case for pension benefits. In the limit where entitlements depend solely on individual contributions, distortions are smaller,[2] but there is no collective risk sharing/distribution either.

The two principles of social insurance design differ along many dimensions, but most important in the present context are the implications for insurance and incentive structures. The universal scheme offers the most comprehensive insurance (redistribution) by including the entire population, ensuring the same entitlements for all. However, the delinking of entitlements and contributions distorts individual incentives, unlike a scheme linking contributions and entitlement. That said, no European country pursues any of these approaches in pure form, but the relative importance of these design elements differs. Welfare arrangements in the Nordic countries tend to be universal in nature, while continental and some southern European countries have more contribution-based systems (Esping-Andersen, 1990).

How entitlements and contributions are linked also have important implications for the mobility of workers/people. A crucial aspect is whether the entitlement is implicit or explicit. In a private-contribution-based scheme, i.e., a contributory pension scheme, the account is individual, and exportability is not an issue. Implicit arrangements do not have such individualized accounts, and exportability is a trickier issue. If, for instance, an individual considers changing labor supply, the after-tax wage is relevant, while the decision is not perceived to affect the provision of welfare services or the social safety net; hence the distortionary effects of taxes. However, a link between entitlements and contributions arises in the context of migration. At the individual level, a migration decision is not a marginal decision. Emigration implies not only an escape from taxation (if moving to a low-tax country) but also from the tax-financed welfare package; the opposite applies for immigrants. Hence, the individual migration decision depends on the entire package: taxes and what they are financing. Importantly, the net benefit/costs of welfare arrangements in general differ across the population, implying that migration incentives are not the same for all. The complicated tax and entitlement implications of migration also point to a possible impediment to labor mobility; welfare arrangements (on both the tax and expenditure side) are very different across countries, creating a non-trivial information problem and thus mobility costs.

This chapter illustrates recent developments in income inequality and tax reforms, then discusses taxation of labor income and the design of the social safety net against the background of increasing mobility of jobs and people. We focus on ways to make tax and welfare arrangements fairer, in the sense of providing insurance to protect against risks and costs of structural adjustments, adopting both a national perspective, given the quite different designs of welfare arrangements across European countries, and a European perspective. Section 4.2. starts out with a brief overview of developments in income inequality and the underlying drivers, and recent trends in the taxation of earned incomes. The role of taxes for mobility of jobs is discussed in Section 4.3., and for mobility of people/workers in Section 4.4. The policy options in designing tax systems and the social safety net when the mobility of both jobs and workers is increasing are first discussed from a national perspective, and then the need for a common social policy in Europe is discussed. Section 4.6 summarizes and provides policy recommendations.

4.2 INEQUALITY, REDISTRIBUTION, AND LABOR INCOME TAXATION

To set the scene, we start by providing a brief account of recent developments in income inequality and taxation.

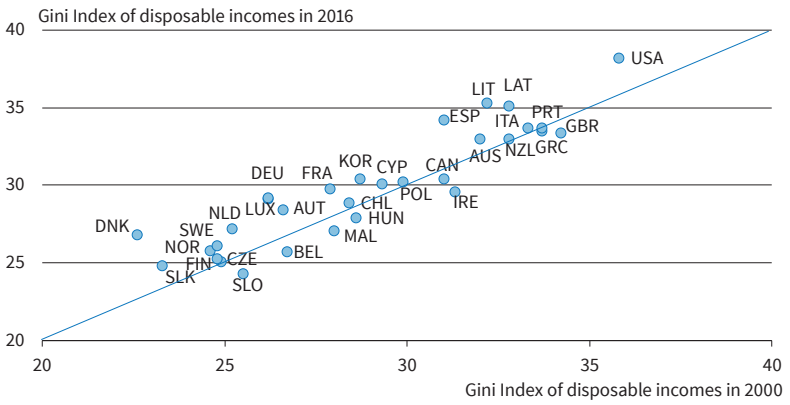
4.2.1 Income Inequality and Redistribution

Developments in inequality in disposable incomes across OECD countries in Figure 4.1 are illustrated

[1] The correlation between per capita income (PPP USD) and the tax share (total tax revenue as a share of GDP) is positive (in 2017: 0.25).
[2] Mandated contributions to e.g., a funded, individualized pension system may have distortionary effects if, for example, agents are myopic wanting to front-load consumption rather than saving for old age.

Figure 4.1

Inequality in Disposable Incomes in 2000 and 2016



Note: Gini coefficient for disposable income equivalized incomes taking into account the household size and structure. Data for Switzerland applies to 2015.
Source: Solt (2019).

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Some countries have lower inequality in disposable income due to both lower inequality in market incomes and more redistribution, but there are also countries where inequality in disposable income is below the mean despite higher market income inequality due to redistribution. Conversely, many countries with inequality above the mean both have higher inequality in market incomes and redistribute less. It is also apparent from the figure that the extent of redistribution is not straightforwardly linked to differences in market income inequality.[5] This suggests that there are a number of country-specific factors explaining how the extent of redistribution is determined besides the role of market income inequality.

by a cross-plot of the Gini coefficient in 2000 and 2016. Generally, income inequality increased over this period; more countries experienced an increase (countries below the 45-degree line) than a decrease (countries above the line). However, the large variation in both the levels of income inequality and the changes in income inequality is noteworthy.

Inequality in disposable incomes (incomes after taxes and transfers) depends on both the underlying inequality in market incomes and the extent of redistribution.[3] The extent of redistribution is a complicated issue depending on the specific design of the taxation scheme and the social safety net. It is beyond the scope of this chapter to detail country-specific structures and changes herein. To highlight some general trends, the following uses summary metrics[4] allowing for cross-country comparisons. Figure 4.2 breaks down the difference in disposable income inequality from the average disposable income inequality into the part coming from differences in market income inequality and to redistribution. This is done here for OECD countries.

Changes in disposable income inequality over recent years (from 2000 to 2016) can similarly be split into the part coming from changes in market income inequality and the part coming from changed redistribution (see Figure 4.3). With a few exceptions, country changes fall in two groups. Some countries – positioned in the north-western quadrant – experienced both an increase in market income inequality and a decrease in redistribution, and therefore disposable income inequality increased. Another group of countries – positioned in the south-western quadrant – had increasing market income inequality but more redistribution, leaving disposable income inequality to either decrease or increase. Less redistribution has thus in some countries exacerbated increases in market income inequality, while it tended to mute

[5] The correlation between market income inequality and the redistribution factor is negative (−0.38).

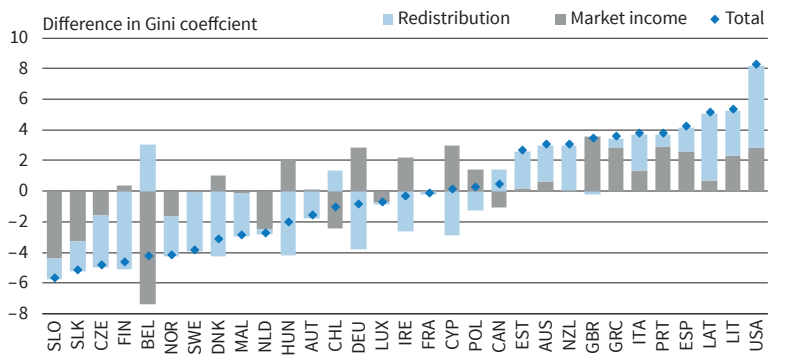
[3] Income inequality depends critically on demographic factors (age structure of the population) and household structures (e.g., the share of single-person households). About 25 percent of the increase in the Gini coefficient between 1987 and 2013 for OECD countries can be explained by changes in household structures and the age composition of the population; see OECD (2018).

[4] Define the Gini measured over market income as G_M and over disposable income as G_D. The redistribution coefficient is defined as $R \equiv G_D/G_M$, and gives the reduction in inequality due to taxes and transfers. A relative measure is better than the absolute difference between the Gini for market incomes and disposable income, since the latter is not independent of the level of inequality. That is, the absolute difference ($G_M - G_D$) can be small either because of much redistribution or because of a high level of inequality in market incomes.

Figure 4.2

Decomposition of Differences in Disposable Income Inequality

The role of market income inequality and redistribution



Note: Denote the Gini-coefficient measured over market income by G_M and over disposable income by G_D. The redistribution coefficient is defined as $R \equiv G_D/G_M$. Define the respective average value by an upper bar, hence $\bar{R} \equiv \bar{G}_D/\bar{G}_M$. The decomposition uses that $G_D - \bar{G}_D = R(G_M - \bar{G}_M) + \bar{G}_M(R - \bar{R})$. Hence, the first term on the RHS is the part attributed to differences in market income inequality and the second term to differences in redistribution.
Source: Solt (2019); EEAG calculations.

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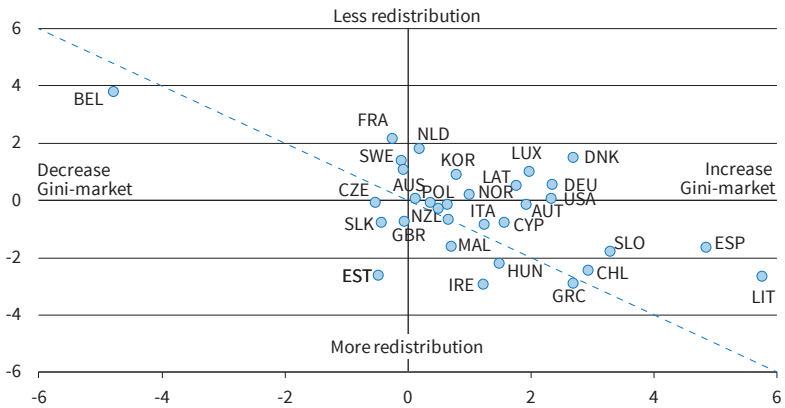
Figure 4.3

Changes in Inequality in Market Incomes and Redistribution Between 2000 and 2016



Note: Data as in Figure 4.1 and Figure 4.2 and decompositions of the same type. Countries above (below) the dotted line have experienced an increase (decrease) in disposable income inequality.
Source: Solt (2019) and EEAG calculations.

the effects of increased market income inequality in others.

Policies have not generally become less redistributive over the considered sample period. As is well known, the extent of redistribution is much larger in European countries than in the United States, and among European countries there are also large variations. Sweden and France are examples of countries with a downward trend in redistribution over the sample period. Note that a decline in measured redistribution may arise either from a shift in the relative importance of different types of income (e.g., from labor to capital income, which on average is less taxed and more concentrated on high-income groups) or reforms of tax and transfer schemes.

Generally, market income inequality has increased over the sample period, which may be explained in part by common trends, including globalization and new technologies, generally perceived to increase income inequality. Market income is made up of both labor and capital income, and changes in both components may contribute to increasing inequality. Wage income may be more unequally distributed due to increasing wage dispersion, unemployment, etc. Capital income has increased in importance in many countries, and since such incomes tend to be more unequally distributed, this is a key factor behind increasing market income inequality, see e.g., OECD (2018). It is noteworthy that changes in market income inequality differ significantly across countries. This shows that country-specific factors matter and that common trends can affect countries differently depending on their institutional structure, industry structure, and policy responses.

In interpreting these findings, note that changes in market income inequality and the redistribution metric may be related. Policy changes affecting redistribution may also affect market income inequality and vice versa. Finally, the above has considered only the overall trend in income inequality on the basis of the Gini coefficient. Using other metrics and focusing on either the bottom or the top of the income distribution may give a different picture.

4.2.2 Labor Income Taxation

The taxation system is a key part of redistributive policies, in that the larger share of tax revenue comes from the direct and indirect taxation of earned income. The share of tax revenue from capital income taxation, corporate taxation, taxation of property, etc. amounts on average to 16 percent of total tax revenue for OECD countries (see discussion in Chapter 3). The taxation of labor income, either when it is earned or when it is spent, is thus the major source of revenue for public sector activities.

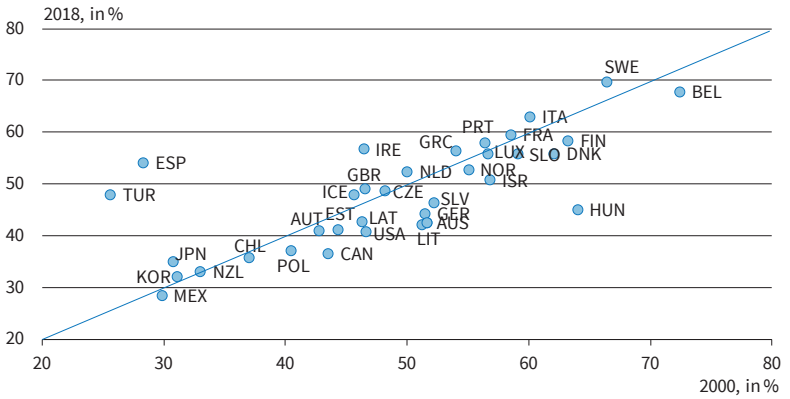
The structure of taxation of earned income differs across countries, with different burdens on income taxation, social contributions, and indirect taxation (VAT and excise taxes). From a labor market perspective, what matters is the total wedge between the compensation for work received by workers and the total costs to employers caused by taxation. The cost of labor to firms is the wage including social contributions, while for the worker the wage net of direct taxes, social contributions, and indirect taxes is the relevant measure of the compensation for work. The total tax wedge is thus the sum of social contributions paid by employers and employees, direct taxes, and indirect taxes. The composition of the single parts does not matter; the sum does.[6]

The key channels through which taxation affects labor markets are via the intensive (how much to work) and the extensive (looking for a job) margin. Different tax concepts are relevant for these margins. For the intensive margin, marginal tax rates are relevant. The development in marginal tax rates for OECD countries is shown in Figure 4.4. The figure is illustrative only, since there are many detailed differences in taxation systems across countries (e.g., the definition of taxable income); these are not captured by the simple metric used here. The first observation is the large differences in marginal tax rates between countries. The level of marginal tax rates is closely correlated with the overall size of the public sector

[6] This is a well-known result holding in both competitive and non-competitive labor markets, see Cahuc and Zylberberg (2004). The split in tax sources matters if the tax bases are not identical. An indirect tax will thus possibly tax non-registered incomes and have a larger tax base than earned income; i.e., a given tax revenue requires a lower indirect tax rate than direct tax rate.

Figure 4.4

Marginal Tax Rates in OECD Countries in 2000 and 2018



Note: Marginal tax wedge (in % of labor costs) for a single at 167% of average earnings with no children. The tax wedge does not include consumption taxes.
Source: OECD Tax Database.

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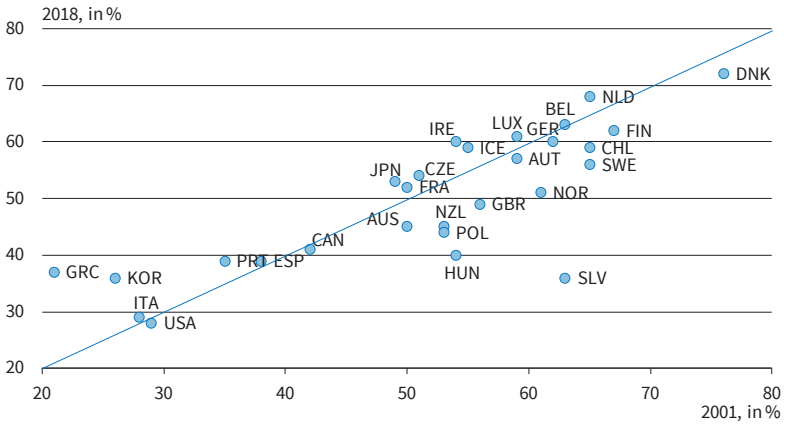
measured by the share of total tax revenue in GDP.[7] Second, more countries lowered (countries below the line) than increased (countries above the line) marginal tax rates between 2000 and 2018. There is thus a weak trend towards lower marginal tax rates. This reflects tax reforms lowering marginal tax rates and broadening tax bases by, say, reducing tax deductions.

Economic incentives along the extensive margin – that is, when going from being out of a job to employment – depend both on the taxes paid and on the transfers received when out of job. So-called effective tax rates measure the combined effect on disposable income of taxation and transfers when shifting from unemployment to employment. Such effective tax rates are shown in Figure 4.5. Country differences are also large here, and countries with high (low) marginal taxes (Figure 4.4) do not necessarily have high (low) effective tax rates (Figure 4.5). However, employment rates are only moderately correlated with effective tax rates,[8] stressing that work incentives are not determined solely by effective tax rates. Second, over time there is a tendency towards lower effective tax rates; more countries have lowered (countries below the line) than increased (countries above the line) marginal effective tax rates. However, the changes are generally small, and there is no landslide decline. Note that the effective tax rates are also important for income insurance in the event of job losses. If the economic gain from finding a job is small (low economic incentive), it follows that the economic consequences of losing the job are small (high insurance/social protection) and vice versa.

[7] The correlation is 0.71 in 2017.

Figure 4.5

Extensive Margin: Effective Tax Rate on Entering Employment in 2001 and 2018



Note: Entering employment at the average wage after two months of unemployment for a single person without children. Effective tax rate includes houseing benefits and temporary in-work benefits.
Source: OECD Tax Database.

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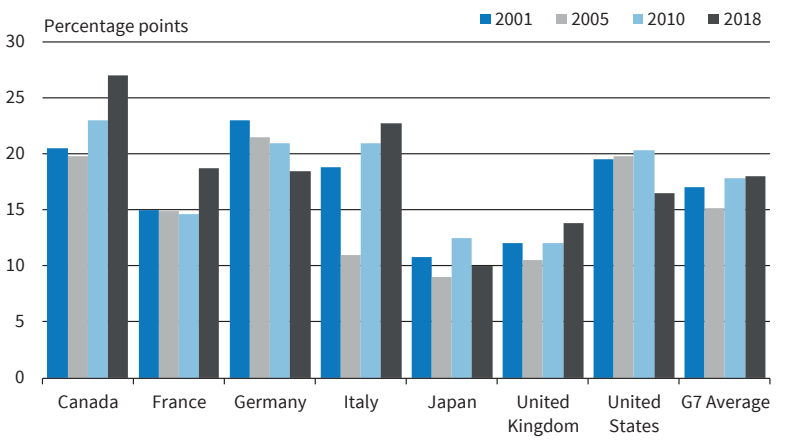
4.2.3 Has Taxation Become Less Progressive?

In recent policy debates, there has been particular focus on whether taxation schemes have become less progressive in recent years. The top income tax rate is a highly disputed parameter and sometimes becomes a symbol for redistributive policy agendas. One example is the 75 percent tax rate on incomes above EUR 1 million announced by President Francois Hollande of France in 2012 and introduced in the years 2013 and 2014 before being abolished in 2015.

There has been an important change in the progressivity of personal income taxes. In most countries, top statutory income tax rates have been reduced significantly over the last decades. But top income tax rates do not reveal much about the true progressivity of the tax system because the outcome depends on the income levels at which these and other tax rates apply and on the way in which taxable income is calculated. Tax systems with very high tax rates often offer exemptions and avoidance opportunities, and some reductions in the tax rate have been accompanied by a broadening of the tax bases. Measuring progressivity is also tricky because the results depend heavily on which types of taxpayers are considered. Comparing the top 1 percent of taxpayers to taxpayers with average incomes may lead to results that differ considerably

[8] For 27 OECD countries the correlation is 0.5 in 2018.

Figure 4.6
Tax Rate Difference Between High and Average Income Households
Difference in tax rates for family with two children at 400% and 100% of average incomes



Source: OECD Tax-Benefit Web Calculator.
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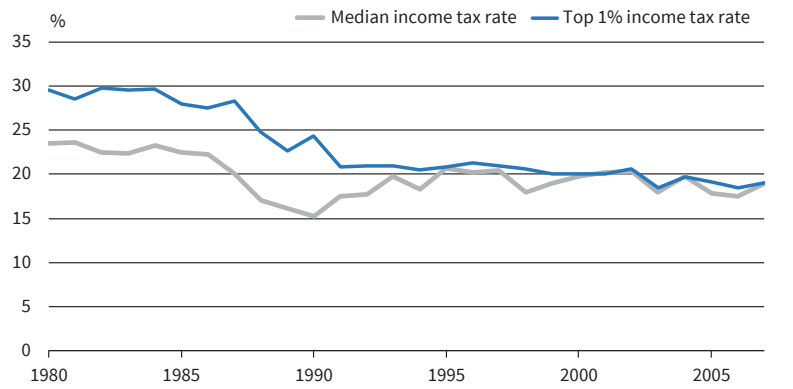
from those of a comparison of the top 10 percent with average taxpayers.

Tax progressivity is illustrated in Figure 4.6 for G7 countries, showing the difference in the average tax rate between a household with 400 percent of the country's average income and an average income household. Data is available only for the period since 2001. For all countries, there is a progressive element, but it differs considerably across countries; however, the G7 average numbers show that there is no clear trend. It should be noted that the most significant changes in income tax systems happened before 2001. The most important example is the US tax reform of 1986, which reduced the top federal income tax rate from 50 percent to 38.5 percent. Various European countries have also reduced their top income tax rates. Germany, for instance, had a top income tax rate of 56 percent in 1999 (including a temporary surcharge introduced to finance reunification, which exists until today). Today the top tax rate is 47.5 percent.

A recent paper by Egger et al. (2019) considers tax progression for the period 1980–2007 for a sample of 14 EU countries and the G7 countries (see Figure 4.7). Progressivity here is measured as the difference between the tax rate paid by a household in the top 1 percent and that paid by a middle-income household. In 1980, the tax system was more progressive in the 14 EU countries, but for both groups of countries there was declining progressivity in the 1980s, and it is now similar for both. This development is both due to rising social insurance contributions paid by middle-income households and to declining income taxes on top earners.

How should the reduction of income tax progression be seen from a policy perspective? The theory of optimal income taxation focuses on three factors to determine the optimal degree of tax progressivity: the social welfare function, the distribution of taxpayers over income classes, and the elasticity of taxable income. The social welfare function is essentially a value judgement about the desirability of income redistribution, which economists usually take as given. Much economic research focuses on the elasticity of taxable income, which in turn results from different behavioral responses: see also Chapter 3. One is changes in 'real' economic behavior (like labor supply, savings and investment, risk taking, or migration to another jurisdiction); others work through incentives to engage in tax planning and tax avoidance, or illegal tax evasion. How tax bases are affected by the mobility of jobs and people is discussed below.

Figure 4.7
Income Tax Progression in the EU14, 1980–2007
Labor income tax rates for top 1 percent and median workers



Note: Included countries are Austria, Belgium, Germany, France, Italy, Denmark, Spain, Finland, Ireland, Greece, the Netherlands, Portugal, Sweden and the United Kingdom.
Source: Egger et al. (2019) and EEAG calculations.
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Combined with information on the distribution of income, the elasticity of taxable income implies a link between tax rates and revenues, and makes it possible to derive the optimal income tax progression for given weights of taxpayer groups in the social welfare function. Empirical studies on this elasticity have produced a wide range of results. Two conclusions can be drawn from this research. The first is that the elasticity of taxable income is not a 'structural parameter'. Instead it depends on the institutional environment

and prevailing economic conditions. For instance, if taxes are collected at source like wage taxes, the elasticity tends to be smaller because there is less room for avoidance and evasion. Second, the elasticity tends to be higher for high-income taxpayers, in particular the top 1 percent (see discussion below). This may reflect that high-income taxpayers often receive a larger share of their income from freelancing work, entrepreneurial activity, or capital. These activities are likely to be more mobile and they offer more opportunities for tax planning to avoid or even evade taxes. Finally, the elasticity of various tax bases is affected by the scope for tax shifting. A growing difference between personal and corporate income tax rates (see Chapter 3) creates incentives to shift income into the corporate sector, reducing tax progressivity.[9] In addition, many tax systems offer a preferential income tax treatment for capital gains, and they allow certain types of labor income, in particular income from entrepreneurial activity, to be treated as capital gains. There is evidence at least for the United States that the share of capital gains in overall income increases with income, reaching more than 45 percent for taxpayers with gross yearly incomes above USD 10 million (Scheuer and Slemrod, 2019).[10] Lower income taxes on these capital gains make the tax system less progressive. These explanations are consistent with the findings reported in Figure 4.7.[11]

However, there are other explanations for the decline in income tax progression.[12] First, population ageing may play a role. If a progressive tax system is seen as an insurance mechanism, young people may be more supportive of tax progression because they face more uncertainty about their lifetime incomes than older people. Second, fragmentation due to international migration or a clearer divide between low- and high-income groups may have reduced support for redistributive policies.[13] Third, views about the importance of incentive effects of taxation may have changed. In the 1980s, politicians like Ronald Reagan or Margaret Thatcher were successful because voters, after the economic instability and the decline of growth experienced in the 1970s, were increasingly skeptical about the idea that governments should regulate the economy or redistribute income. Ideas like the Laffer Curve effect, which is the hope that tax rate cuts will lead to more tax revenue because of improved incentives, were popular.[14] More generally, there was a shift in focus towards structural issues, including the incentive structure for human capital accumulation and work.

Whether or not countries want to return to more progressive tax systems ultimately depends on political value judgements. The higher observed elasticities of the tax base for high-income taxpayers suggest, however, that returning to higher tax rates on high-income earners may not generate much more tax revenue. At the same time, more attention should be devoted to the definition of the tax base and tax exemptions, in particular for capital gains.

4.3 MOBILITY OF JOBS AND LABOR INCOME TAXATION

Globalization increases the mobility of goods and jobs. Both political factors, including reductions in or removals of tariffs, non-tariff trade barriers, regulations, etc., and technological factors, including reduced transport costs and improved information technologies, have significantly reduced the costs of moving goods and services across borders. Increased mobility implies tougher competition, and production of both final and intermediate goods becomes more footloose when production can move more easily to destinations with lower production costs while still serving the same customers. Simultaneously, a larger share of economic activity is exposed to foreign competition. Consequently, production and therefore labor demand and jobs become more sensitive to local cost conditions compared to that of competitors. Since wages are an important cost component, these effects imply that employment becomes more sensitive to wages (a flatter labor demand curve[15]), which in turn implies that tax becomes more distortionary. Relatively high wages (seen relative to productivity) and high tax wedges may harm employment more, the more globalized the economy. Hence, the costs of tax-financed welfare arrangements increase via higher distortions at the same time as the revenue obtained from the tax is reduced.

In general equilibrium, this reasoning is less straightforward. Although labor income taxes may increase wages, the industry and trade structures adjust too. Higher wages shift production towards activities for which the country has comparative advantages (high productivity); as a result, overall productivity increases and the terms of trade change

[9] See Fuest and Weichenreider (2002).

[10] There may well be other reasons for lower taxes on capital gains than preventing income shifting to the corporate sphere. They may just reflect political lobbying for targeted tax reductions, which are technical enough not to be noticed by the general public.

[11] Swank and Steinmo (2002) present earlier evidence questioning that globalization is a dominating factor for tax policy. Adam and Kammas (2007) find that social insurance contributions are higher in more open economies and conclude that globalization increases demand for insurance, as in Rodrik (1998).

[12] One should note that there are also forces that should push towards more, not less, tax progression. For instance, the median voter theorem would predict that growing income inequality should lead to more, not less, tax progression.

[13] This idea is developed by Collier (2018).

[14] Ronald Reagan's comment on the idea that lowering high income tax rates would produce higher revenues was as follows: "A few economists call this principle supply-side economics. I just call it common sense," https://www.ontheissues.org/Celeb/Ronald_Reagan_Budget_+_Economy.htm.

[15] Globalization does not in general increase the wage sensitivity of labor demand. At higher levels of integration, firms may outsource larger parts of their production to foreign (low-wage/low-cost) countries. This, in turn, implies that firms' costs and thus production and thereby domestic employment become less sensitive to local wages, as the cost share of local labor has been reduced (see, e.g., Skaksen and Sørensen, 2001).

to the advantage of the home country; see, e.g., Obstfeld and Rogoff (1996). This in turn affects tax bases and the ability to finance welfare activities, implying that globalization may not necessarily lead to a retrenchment of welfare arrangements.

Globalization not only affects the sensitivity of labor demand to the wage but also its position (level). Debates on globalization and tax-financed welfare states tend to ignore the gains from trade. These gains arise from lower information/transportation costs and specialization on production. They appear as gains to consumers in the form of lower prices (driven by more varieties and/or tougher competition) and higher aggregate real wages (more specialization). Higher real wages increase the tax base both directly (through the higher income) and indirectly if labor supply and thus employment is affected (see below). This budget effect is partly neutralized by increased public expenditures, since wage developments in the public sector tend to follow wage developments in the private sector. However, in net terms there is a positive revenue effect, creating some room in the public finances for a reduced tax rate. This in turn reduces the efficiency costs of financing the welfare arrangements; see, e.g., Andersen and Sørensen (2012).

The distortionary effects of labor income taxation ultimately depend on labor demand and supply elasticities[16] and on wage formation. It is thus crucial to know whether evidence confirms that these elasticities have changed so as to make labor income taxation more distortionary.

Starting with labor demand elasticities, a meta-study by Lichter et al. (2015) concludes that there is substantial variation in elasticities between sectors and countries. Labor demand is less sensitive to wages in the short run compared to the long run, and employment protection legislation tends to make labor demand less wage-elastic. There is evidence that labor demand has become more elastic over time, possibly due to technological progress and globalization (see also Slaughter, 2001; Hijzen and Swaim, 2012; and Senses, 2012).

A vast amount of empirical literature assesses elasticities of labor supply (see surveys by, e.g., Evers et al., 2005; Meghir and Phillips, 2008; Chetty et al., 2011; and Bargain and Peichl, 2013). As is well known, estimated labor supply elasticities are not large, and in most cases significantly below one. A common finding is that labor supply is more responsive along the extensive (participation) than along the intensive (hours) margin. Labor supply elasticities are generally larger for women than men, especially for single mothers. Moreover, these elasticities tend to be falling in the overall employment rate; see Evers et al. (2005) and Bargain and Peichl (2013). In the same vein, there seems to be a declining time trend in labor supply elasticities, which may be attributed to changes in work preferences, including a stronger attachment of women to the labor market (which in turn may also be related to social preferences and gender issues, also reflected in expansions of childcare). These findings do not preclude potentially large responses for specific groups, e.g., due to high implicit tax rates or a clustering of individuals around thresholds in the tax system.

There are surprisingly few empirical studies exploring the link between taxation and wage competitiveness. Alesina and Perotti (1997) consider how relative unit labor costs depend on labor taxation, focusing on the role of wage setting institutions. They find that taxes increase relative unit labor costs, especially in countries with intermediary levels of centralization, whereas there is only a small effect with more centralized bargaining. Daveri and Tabellini (2000) find that taxes increase wages in continental European countries, but they do not find significant effects for the Anglo-Saxon and Nordic countries. Lane and Perotti (2003) focus on how the transmission from taxes to wages depends on the exchange rate regime. In flexible exchange rate regimes, they do not find any effect, while there is a small wage push effect in countries with a fixed exchange rate. Bennmarker et al. (2012) find on Swedish data that an earned income tax credit has a small but significant negative effect on wages.

In summary, the evidence leaves an inconclusive verdict on whether the distortions from labor income taxation have increased or decreased in recent years. The larger elasticity of labor demand suggests an increase, while the lower elasticity of labor supply suggests the opposite. Taken at face value, this evidence does not indicate that the consequences of labor income taxation have changed significantly in recent years.

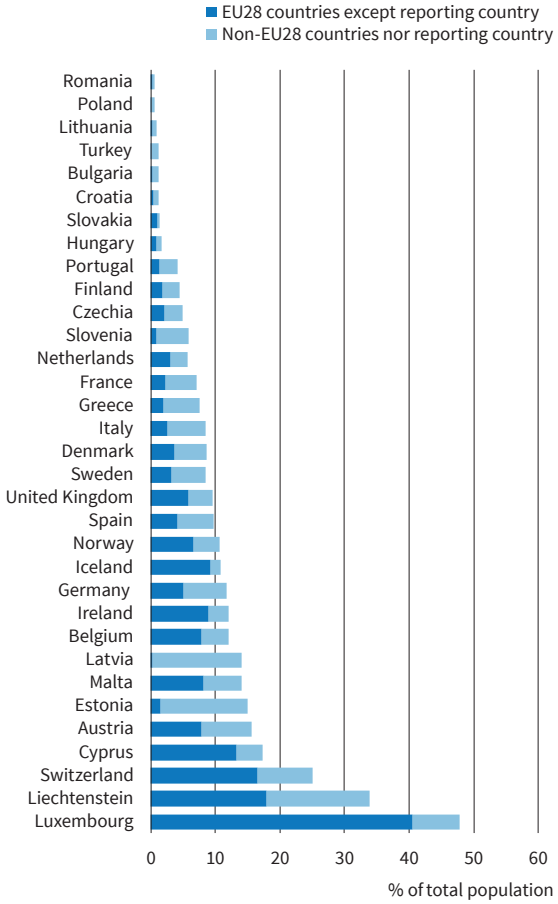
4.4 MIGRATION AND LABOR INCOME TAXATION AND ENTITLEMENTS

Labor is reallocated between countries via migration and cross-border workers. Migration has many drivers – economic, humanitarian (refugees and family unification), educational – and the group of migrants is thus very heterogeneous (see EEAG, 2017). A key element of the single market is the free movement of people and labor within the European Union (and associated countries). Immigration from outside the European Union is determined by international conventions and national rules. The following focuses on the economic implications of migration, in particular for the labor market and public finances.

Both as a result of the single market and global migration waves, the share of foreign-born has increased in most EU countries. Migration patterns within the EU have been significantly affected by EU

[16] In the extreme case of a 'textbook' small open economy facing exogenous product prices, employment depends solely on labor supply (wages), and hence only the labor supply elasticity matters.

Figure 4.8
Share of Population with Foreign Citizenship in 2018



Source: Based on data from Eurostat. © CESifo

enlargement, especially migration flows from East to West. These migration flows have been documented in, e.g., Atoyan et al. (2016), EEAG (2017), and Alcidi and Gros (2019). A snapshot of these developments is given in Figure 4.8, showing the share of the population with foreign citizenship in different European countries in 2018. Across EU countries, about 10 percent of the population had a foreign citizenship in 2018. A little more than half of this group are citizens of another EU country, and a little less than half are citizens of a non-EU country. The figure also displays considerable country differences with a higher share of foreigners in the 'old' compared to the 'new' member states, reflecting the abovementioned east-west migration pattern.

Discussing migration, it is useful to make a distinction between the 'labor' and 'welfare' perspective. The former focuses on how migration affects labor markets in both the destination and the source country, while the latter addresses the implications for welfare arrangements. Although these issues cannot be completely separated, the distinction captures essential arguments in the discussion, often leading to rather different views on migration and thus also policy recommendations. The following gives a brief account of some of the key arguments.

4.4.1 Migration and Labor Markets

Migration (labor mobility) is associated with efficiency gains, since it allows a better allocation of labor according to productivities broadly interpreted. An important role of trade is to reallocate production and thus employment to exploit comparative advantages, but this does not in general ensure an efficient geographical allocation of production factors. Labor mobility can eliminate geographical differences in labor productivity, and hence create efficiency gains. Labor mobility is thus one of many mechanisms through which economic convergence between countries can arise. This is an essential element of the European Single Market, which comprises free movement not only of goods, services, and capital, but also of labor. If labor migration responds to differences in wages and employment possibilities, it serves to reduce disparities in economic development across EU countries. This may also be an important adjustment mechanism within the European Monetary Union.

However, mobility of labor differs from that of capital, since locational preferences matter for the former, and such preferences can arise from habit formation (home bias), culture, language, and geographical factors/climate, but also institutions, including welfare arrangements.

The efficiency gains from labor mobility do in general have equity implications. As an example, emigration of skilled labor may reduce the wages of unskilled labor, if the two types of labor are complements in production. Agglomeration and asymmetric effects of globalization (sectors/countries) also have redistributive consequences not only within but also between countries.

Redistributive effects also arise if immigration is biased towards low-skilled labor. Globalization and technological changes are associated with so-called skill-biased changes, implying that demand for low-/less skilled labor is declining in high-income countries. If immigration increases the supply of unskilled labor at the same time as the demand for low-skilled labor declines, the incumbent group of unskilled experiences lower wages and/or higher unemployment. Moreover, the inflow of unskilled labor tends to reduce prices of, say, service activities, mainly to the benefit of high-income groups. Through these channels, unskilled immigration may increase income inequality. While these mechanisms are not qualitatively different from the outsourcing of production-intensive, unskilled labor (and import of the goods at a lower price), immigration is a more visible consequence of globalization, fueling discontent, and it is a major reason for the recent globalization backlash. It is a source of social tension, since groups already under pressure in the labor market find that they carry a disproportionately large share of the adjustment burden in the form of deteriorating job

prospects and/or lower wages – hence the view that 'they take our jobs.'

Finally, although the European Single Market formally ensures labor mobility, there are many obstacles to such mobility, and economic and non-economic mobility costs are not trivial, even within the European Union. Some of these obstacles relate to the welfare implications of migration; see discussion below.

4.4.2 Welfare Arrangements and Public Finances

Migration affects welfare arrangements via both the expenditure and the financing side. Importantly, these effects differ qualitatively from the usual discussion of tax distortions, since a migration decision is not a marginal decision, but a decision on the entire package (Tiebout, 1959). Emigrants opt out not only of tax financing, but also of access to the social safety net and publicly provided services.

Welfare arrangements are associated with both push and pull factors on migration. The push factor is discussed mostly in relation to the scope for redistributive policies and the possibility that high-income groups opt out of welfare arrangements by emigrating. This obviously constrains the financial possibilities for redistributive policies. The dilemma is that maintaining high taxes on high-income groups may erode tax revenue due to emigration, but tax reductions to prevent emigration also reduce revenue, and in either case the consequence is less redistribution. This is a race-to-the-bottom mechanism forcing countries to pursue less redistributive policies.

This argument is reinforced by the pull or magnet argument that generous welfare arrangements are particularly attractive to immigrants likely to be net beneficiaries of the welfare arrangement (see, e.g., Borjas, 1999; and Razin et al., 2011). If immigrants with low qualifications choose destination countries with generous welfare arrangements, they are likely to become reliant on welfare benefits, which strains public finances.

However, the push factors may be exaggerated by considering only tax payments. As noted, migration is not a marginal decision, and the package argument applies. Migrating to a low-tax country has a tax advantage for high-income groups, but the flipside is a less generous welfare package. The relevant economic comparison is not only the after-tax income in the two countries, since the value of access to publicly provided services (day care, education for the children, health care, etc.) should be included.[17]

There is substantial heterogeneity in the way welfare arrangements affect migration incentives, also across the life-cycle. There is a clear age-dependency or life-cycle pattern in individual contributions to and benefits from welfare arrangements. Contributions are naturally concentrated during working life and thus the age group 20 to 65 years, while benefits in the form of day care and education mainly benefit the young, and health care and pensions the old (see, e.g., Andersen and Bhattacharya, 2017). This phenomenon is often interpreted as an implicit or social intergenerational contract; the young and the old are net beneficiaries, and the 'middle-aged' net contributors. This pattern is seen in all countries, although the age dependencies depend on the extent of welfare arrangements (and thus tax levels). Besides this intergenerational link, there is an intragenerational link via the social safety net, since progressive taxation has important implications for income insurance and the distribution of income within a given year.

The implicit contract can be interpreted from a redistributive perspective, but also from a capital market/insurance perspective. In a lifetime perspective, the implicit contract offers insurance against various contingencies that may happen throughout life; public education makes educational choice less dependent on financial factors, health care reduces the need for precautionary savings, etc. What in an ex post situation performs a redistributive role (transfers to the sick from the non-sick) is in an ex ante sense providing insurance. The implicit nature of this contract and the fact that it comprises the entire population is attractive from a redistribution/insurance perspective. However, this contract is challenged by selection in migration patterns. It is well known from the insurance literature that adverse selection can have serious effects on market outcomes, and the push and pull factors discussed above give rise to such adverse selection mechanisms for the implicit/social contract.

Even if the implicit contract early in life (ex ante) is appealing, it may be less attractive later in life (ex post) when the position in the income distribution is known. Migration creates a possibility to opt out of the contract. Education is a prime example of this. In countries where education is largely tax-financed – as is the case in many EU countries – the implicit contract entails that education is paid back via tax payments later in life, when the acquired human capital results in attractive jobs with high incomes. This implicit contract can be broken by, after having completed education, migrating and bringing the human capital to a country with lower tax payments and possibly a higher wage premium to human capital. For the same reason, it may be difficult to attract foreigners with high human capital. Another example

[17] Revealed political preferences imply that the current welfare package has the support of the decisive median voter, who supports the scheme by definition, and therefore does not have a migration incentive. Even if the median voter has an income above the median, there may be support for the welfare scheme due to its implicit insurance value (Moene and Wallerstein, 2001). Adding mobility costs, the push factor may apply only to a small subset of the population. Note that temporary migration to acquire education or international work experience is a different issue, since it also brings value to the domestic labor market when the person returns home.

is pensioners – so-called 'snowbirds' – bringing their pension from, say, northern Europe to the warmer climate in southern Europe, which also offers more lenient taxation, and still having the option of returning home to tax-financed health care if serious health problems arise.

Mobility and migration add another extensive margin response of importance for income taxation. Even though mobility involves the entire tax-welfare package, mobility may be an issue for large net contributors, especially among high-income groups facing large tax payments and for whom the implicit insurance value of the social safety net broadly interpreted has low value. Taxation of highly mobile groups raises difficult questions. To the extent that well-defined specific groups differing in *mobility elasticity* can be identified, there is an argument for taxing these groups more leniently than less mobile groups; under some conditions, this also maximizes tax revenue (if the elasticity is higher than unity).[18] However, this challenges the notion of fairness that not all are taxed at the same rate. Moreover, the high mobility of these groups gives rise to tax competition between countries, and may thus lead to suboptimal tax rates.

In sum, the push and pull factors give rise to selection mechanisms that change the population structure, and this may challenge tax-financed welfare arrangements. This does not imply that retrenchment of welfare arrangements generally follows, but that adjustments are required, and that race-to-the-bottom mechanisms may arise in specific policy areas.

4.4.3 Evidence

There is an empirical literature assessing the extent to which welfare arrangements are a pull or magnet factor influencing immigration flows, but the support of this hypothesis is not strong (see Pedersen et al., 2008; De Giorgi and Pellizzari, 2013; Giulietti et al., 2013; and Skupnik, 2014). Network effects seem to be of some importance for migration patterns. East-west migration patterns have mainly been affected by income differences, and more recent south-north migration patterns by unemployment (Alcidi and Gros, 2019). However, among refugees there is some indication that the better educated seek out countries with high returns to qualifications, and the less educated countries with more effective migration procedures and generous welfare arrangements.

In a recent study on Norwegian data, Bratsberg et al. (2019) find a form of excess migration or excess churning as a result of the single market for labor and the differences in welfare arrangements. Employment in a country with a generous welfare system like Norway is associated with a gain in terms of welfare entitlements. This may make migrant workers willing to accept a lower starting wage in order to gain 'insider' status, and firms have an incentive to hire such workers. Over time, the reservation wages of these migrant workers increase as welfare entitlement is gained, giving firms an incentive to replace the worker with a new migrant worker willing to accept a low starting wage.

In general, the young, males, and the better educated have a higher propensity to migrate. For the better educated, there is an element of brain circulation rather than brain drain among high-income countries; that is, temporary migration but eventual return to the country of origin. However, the United Kingdom and United States are net winners in the competition for talent, having attracted more highly educated individuals. Interestingly, migration flows are not driven by wage gaps only, but also by structural factors including general life satisfaction, opportunities for children, quality/trust in national institutions, and urban amenities (see EBRD, 2018; Atoyan et al., 2016). This lends support to the view that the entire 'package' determines migration incentives, and that countries with low and ineffective public spending and provision of public goods face the largest emigration forces. A tax reduction may thus in isolation have no significant effect on migration flows.

The migration incentive differs significantly across socio-economic groups and how they interact with tax-financed welfare arrangements. Eight EU countries offer preferential tax schemes to foreigners, in some cases targeting high-income groups. These schemes are intended to retain potential emigrants and attract foreigners. In particular, groups with very high income may be more inclined to emigration. A recent piece of literature analyzes the response of high-income groups to changes in the average tax rate. Kleven et al. (2019) survey the empirical evidence from microstudies of how migration responds to taxes.[19] For high-income groups (top 1 percent of the income distribution), the elasticity of the stock of foreigners to the average net of tax rate (one minus the average tax) is about 1.6, and thus high. However, this high elasticity pertains to a rather selective group with little location-specific human capital and ties to specific firms, such as star scientists, entrepreneurs, and professionals in sports, and thus cannot be taken to apply to wider groups in the labor market.

More generally, when assessing how migration affects public finances, two points are in order. First, it is important to distinguish between the ex ante and ex post effects. The former refers to whether generous welfare arrangements are a pull factor attracting immigrants that tend to benefit from the welfare arrangements. Even if there is no such welfare magnet and migration flows are determined by other factors,

[18] For a discussion see Scheuer and Slemrod (2019).

[19] See also Kleven et al. (2013a,b).

public budgets are affected ex post if there is immigration of groups tending to have low employment rates and thus ending up relying more on welfare benefits.[20] Similar reasoning applies to emigration – the push factor – of high-income groups. Second, the public finance implications obviously depend on the type of migration (education, work, family unification, refugees). However, all forms of migration irrespective of the cause affect public finances, via both the revenue and expenditure side, and this is closely related to the labor market performance of immigrants. Admission of migrants on humanitarian grounds is clearly not motivated by economic concerns in the first place, but the economic consequences are of course important for the host countries.

The public finance implications of immigration are intimately related to the employment performance of immigrants for the basic reason that individuals in employment contribute more taxes, while those who are not employed are often entitled to some form of public support. In all European countries, public finances are, therefore, very sensitive to the employment level, with larger sensitivities in countries with more extensive welfare arrangements. This also implies heterogeneity in the public finance implications of immigration across immigration groups. In short, groups of immigrants having employment rates above the average tend to improve public finances, and vice versa (see, e.g., OECD, 2013, and Hansen et al., 2016). Across European countries, employment rates for immigrants from outside the European Union are generally lower than for the native population (EEAG, 2015), and this is related to refugee and family unification. Employment rates for EU migrant workers are generally high, as should be expected.

4.4.4 Migrants' Rights and Duties

Migration and mobility raise a number of issues in terms of rights and duties; here the focus is on taxation and social insurance/security. It is important to distinguish between migration within the European Union and migration between the EU and non-EU countries. The following mainly discusses intra-EU migration/mobility.

As is well known, there are substantial differences in welfare arrangements across EU countries, and this is of importance in relation to the rights (access to welfare arrangements) and duties (tax payments) of migrants. The heterogeneity in rules is in itself a significant impediment to migration/mobility due to information/transparency issues and uncertainty related to the consequences of migration decisions. It is beyond the scope of this chapter to give a detailed account of differences in welfare arrangements and the implications they have for migration. The following focuses on aspects related to migration and mobility.

EU citizens can reside freely in another country for up to three months, and can reside longer if they are workers, self-employed, or if they have enough resources to support themselves and their families. Even if an EU citizen is no longer in work or self-employed, the status of worker/self-employed is retained under some conditions. However, non-worker migrants will not automatically obtain entitlements to welfare benefits. After five years of residence, citizens obtain rights for permanent residence and to be treated in all ways as nationals of the member state in question.

Starting with taxation, there are no EU-wide rules for the taxation of mobile/migrating EU nationals living or working in another EU country.[21] Income taxation is generally based on a residence principle (total income being taxed), but the definition of 'tax residence' differs between countries (typically a person will be considered tax-resident in a country if he/she has lived more than six months to a year in the country). In some cases, foreigners residing in the country are offered more lenient taxation (see discussion above), but there are also examples where tax obligations in the source country remain after migration. Taxation is governed by bilateral double-taxation agreements, implying that numerous principles and approaches are pursued (European Commission, 2014). This complex situation also raises questions about tax avoidance and tax enforcement.

Turning to social insurance or security, the EU system for coordination of social security systems – see Box 4.1 below – lays down the principles to protect the social rights of people moving within the European Union. While the principles are clear, their application often gives rise to problems, and they are not always seen as ensuring fair mobility. When interpreting these principles, the European Court of Justice has generally given mobility precedence over welfare.[22]

Mobility/migration raises difficult issues on insurance provision, since the labor and welfare views are intertwined. Migration raises two key issues in relation to social security: to ensure that migrants do not lose insurance coverage, and that insurance arrangements do not distort mobility decisions.

The main argument for free mobility is allocative efficiency. Free mobility of labor facilitates relocation

[20] Welfare generosity may affect return migration. Reagan and Olsen (2000) find for the US that welfare benefit generosity does not affect the return probability, but the welfare program participation negatively impacts the immigrants' probability of returning. Using German data, Kirdar (2009) finds that the effect of immigrants' unemployment on return migration varies according to the length of the unemployment spell. Specifically, the longer the unemployment spell, the more likely the immigrant is to remain in Germany. On the contrary, short-term unemployed immigrants tend to return-migrate. An interesting study for Norway by Bratsberg et al. (2014) finds that the financial crisis disproportionately affected migrant workers. Although a negative labor market shock increased return migration, the majority of labor migrants remained in Norway claiming unemployment benefits.

[21] See European Union (2019), Help and Advice for EU Nationals and Their Family, https://europa.eu/youreurope/citizens/work/taxes/income-taxes-abroad/index_en.htm.

[22] For a discussion of EU social security coordination from a judicial perspective see, e.g., Bruzelius et al. (2018) and Pennings (2018).

of workers, depending on differences in employment prospects (wages/productivity), and this ensures a better allocation of production factors within the European Union. This contributes to higher incomes for the mobile workers, but also releases aggregate gains for the European Union.

Well-known problems of adverse selection and moral hazard pose problems for insurance markets, and critically affect the available type of insurance and the specific contract properties. Private insurance markets for unemployment are examples of these challenges and why intervention is common in this area.[23] Shift of insurance provider is a particularly challenging issue, and insurance contracts typically feature waiting periods (also known as elimination periods and qualifying periods): that is, a time span between commencing contributing to the scheme and when benefit entitlement is achieved. Such a delay serves to reduce adverse selection and moral hazard problems. Waiting periods exist for, say, unemployment insurance (in many countries one year) and health insurance (can be up to four to five years).

Mobility/migration raises the fundamental issue of establishing who should be providing the insurance: the source country or the destination country? To illustrate, it would seem plausible that the source country insurance applies in the case of temporary mobility, while the destination country insurance applies in the case of permanent migration. Even this simple principle is challenged by the fact that the time dimension – temporary or permanent – of migration is typically not known ex ante and depends, among other things, on labor market developments (at home and abroad) and the insurance provided. Cross-country differences in insurance arrangements and different levels of income (and thus benefit levels) reinforce these problems. To see this, suppose that employment prospects are temporarily better in country A than B, and efficiency arguments thus call for temporary migration of workers from country B to A. If these countries are similar in other respects, this may be relatively straightforward. However, if they are different, say country B offers higher unemployment benefits than country A (could be for political reasons or because the general income level is higher than in country A), the situation is different. If migrating from country A to B gives entitlement to insurance in country B, the migration decision is distorted, since it is influenced not only by the temporary employment prospects but also by the gain from getting access to a more generous insurance scheme provided in country B (see the evidence for Norway reported above). This is even clearer if the temporary migrant can bring, say, unemployment benefits back to country A. While stylized, the example brings out how migration decisions may be affected by welfare arrangements.

These problems become clearer when considering some of the problems associated with the coordination of social security across EU countries.[24] The levels of unemployment benefits (and many other dimensions) differ between EU countries. If migrant workers are entitled to unemployment in the home country, they are entitled to join the unemployment benefit system in the destination country (provided any membership fees or equivalent are paid). Even if replacement rates are the same, benefit levels (in PPP-adjusted euros) are different between countries. Hence, the benefit level in a high-income country (say, the Netherlands) exceeds average wages in some low-income countries (say, Bulgaria). If migrating from a low-income country to take a (temporary) job in a high-income country, unemployment has no serious economic consequences, since benefits are still higher than wages in the home country (and the purchasing power even higher in the case of exportability of the benefit). A further complication with exportability of benefits is that countries with relatively generous benefits tend to tie a number of conditionalities to benefit entitlements (so-called workfare requirements). In principle, these conditions apply even if exporting the benefit, but clearly the enforcement of such conditionalities is an open question if the destination country does not apply the same type of conditionalities. Similar problems have been seen in relation to study grants. While entitlement is not free, it is acquired after short spells of employment. Family benefits are also problematic, since eligibility for child benefits is gained even if the child does not move with the parent to the new home country.

It should also be noted that the principles work well in some areas. Pension rights are typically acquired via residence or employment. Pensions are exportable under an aggregation principle and the so-called pro-rata principle such that the total pension for a migrant is made up of pensions from different countries in proportion to the part of working life spent in the respective countries. The principles thus deal with migration in a straightforward and fair way. However, this does not imply the absence of challenges. Pension benefits differ across countries, making it difficult for the individual to assess the pension benefit (and thus replacement rate) they are entitled to as a pensioner. There are country differences in how pension entitlements are related to employment histories (e.g., points system, income during the last five or ten years, etc.) and this implies that pensions for

[23] Private insurance companies do offer insurance against unemployment, but often as a top-up to the mandatory/public part of unemployment insurance. Private insurance is problematic because unemployment is associated with aggregate persistent shocks and adverse selection and moral hazard issues, see, e.g., Barr (2001). For an account of unemployment insurance systems within the EU see, e.g., Esser et al. (2013).

[24] A particularly striking example of this complexity is that foreign students from EU countries in Scotland are exempt from tuition fees, as are Scots, but students from other parts of the United Kingdom are charged tuition fees.

migrant workers may depend on where they worked when they were young and old. Pensions are also taxed differently across countries (see, e.g., Genser and Holzmann, 2019). In some countries, contributions are exempt from income taxation and pensions are taxable income, while in others, contributions are taxable income, and pensions are not taxed. Some countries tax the return on accumulated assets, others do not. This raises issues not only for tax-financed pensions but also for funded, contributed schemes. One argument in the debate is that these problems are of secondary importance since the quantitative importance of the problem is modest. It is true that current numbers on exportability of benefits do not suggest that large financial burdens arise. However, the effects cannot be judged solely from the budgetary consequences. As noted, allocation of resources is distorted, and that is an additional cost. Moreover, political responses are driven not only by narrow budget considerations but also by whether rules and regulations support a fair outcome. Some of the examples of exportability of benefits mentioned above have challenged the notion of fair mobility. If EU regulations are considered binding, the policy response may have other costs. For example, in EU member countries, most public jobs must be available to all EU nationals and public universities must charge the same fees to local and other EU citizens. Of course, language proficiency may be required of civil servants and students, and need not be required for reasons of efficiency. In Denmark, there are political efforts to forbid tertiary education in languages other than Danish, aiming to make a largely tax-financed educational system less attractive for children of other countries' taxpayers. Should those efforts be successful, the principle of equal access will in practice backfire and make it more difficult for Danish and other EU citizens to study and work and pay taxes anywhere in an EU integrated labor market.

4.4.5 Migration Rules

While there is free mobility of labor within the European Union, migration from outside the European Union is regulated by the member states. Such migration rules are complex. Some forms of migration are covered by international conventions, while others are unilaterally decided at the country level. As an example, under EU law there are 20 different categories of third-country nationals, each with different rights depending on the links to EU member states or their need for protection. While the cases of students and migrant workers may be relatively simple (see EEAG, 2015, on the rules for worker migration within the European Union), the rules applying to asylum seekers and family unification are detailed and complex (see EEAG, 2017). The attractiveness of becoming an EU citizen is also reflected in the fact that some countries sell citizenships or close substitutes to it, including Bulgaria, Malta, Cyprus, and Austria (Konrad and Rees, 2019). Given free movement within the European Union, this is effectively an EU citizenship.

In addition, it is not always easy to make a sharp distinction between a refugee and an economic migrant, since there are multiple reasons for migration, and informational asymmetries exist between applicants and asylum administrators. In designing migration polices, there is also the dilemma that those who make it to the border (in the case of long-distance conflicts) are selected among the displaced people and seldom include the weakest segment of the population.

In recent years, there has been a clear trend towards more restrictive and selective immigration rules. In short, most countries are trying to admit only individuals who can fit into the labor market to ensure 'positive' rather than 'negative' selection. This outcome may be interpreted as a 'race to the top' with countries trying to attract individuals with high human capital. One example is preferential tax treatment schemes for migrants targeting high-income groups, as mentioned above. An ageing population is in some countries driving pro-immigration policies to attract qualified people of working age to rebalance the age structure of the population (a remedy for low fertility rates). One interesting example is Poland, which has recently introduced an income tax break for most young people below the age of 26 to reduce emigration and incentivize return migration. This should be seen against the backdrop of large net emigration flows and an ageing population.

4.5 SOCIAL SAFETY NET AND TAXATION – POLICY OPTIONS

The social rights of migrants are a contested issue in the European Union. There is a clear divide between those taking the 'labor' perspective, who argue for the need for rule simplification and harmonization to reduce barriers for worker migration/mobility even if it comes at the cost of less social security, and those taking the 'welfare' perspective, who advocate steps to avoid 'misuse' of welfare arrangements even if it may come at the cost of less mobility. Views on the 'welfare' perspective vary between European countries, reflecting different varieties of welfare models. There are also obvious differences of interest between countries tending to experience net emigration flows and those experiencing net immigration flows. Countries with extended welfare arrangements, like the Nordic countries, are particularly concerned about how to maintain welfare arrangements, while the source countries for many immigrants do not share this concern.

The issue of how to compensate the losers from structural changes that produce gains to society at large is particularly relevant. This role rests primarily on the social safety net and the taxation system.

BOX 4.1 EUROPEAN SOCIAL SECURITY COORDINATION REGULATIONS

All persons being citizens in a member state are also citizens of the Union. Within the European Union, individuals have freedom to move and reside freely. Social policy is national sovereignty, but mobility/migration is regulated by the principles of social security coordination.

EU social security coordination (regulation 883) ensures that all migrant EU citizens (EU countries plus Iceland, Liechtenstein, Norway, and Switzerland) have social coverage. The regulation specifies the responsibilities of the member states as regards mobile and migrant EU citizens. The part of social security covered includes unemployment, sickness, maternity/paternity, old age pension, disability, and work accidents. The rule applies both to workers and to others moving within the European Union. These coordination rules do not replace national systems, and member states can unilaterally decide who is to be insured under their legislation, which benefits are granted, and under what conditions.

The specific elements of these coordination rules have been changed numerous times and are currently under revision.

The coordination rests on four main principles:

- Individuals are covered by the legislation of one country at a time, ensuring that contributions are paid only in one country. The decision on the legal jurisdiction to which a given individual belongs is made by the social security institutions and is not an individual choice (the principle of single applicable law).
- EU migrant citizens have the same rights and obligations as the nationals of the country for which the coverage applies (the principle of equal treatment or non-discrimination).
- Periods of residence or insurance in one member state count when deciding benefit entitlements in a new host country (the principle of aggregation).
- EU migrant citizens should receive acquired benefits regardless of country of residence (the principle of exportability).

There is an important difference between economic activity (workers) and non-active citizens. For the former group, member states are obliged to follow the non-discrimination principle from the day of arrival. Individuals are free to live in another member country if they are in employment, self-employed, or can document sufficient means not to be a financial burden for the host country. As a rule, workers are covered by the country where they work, pensioners will receive pensions from the countries where they worked, and non-working citizens are the responsibility of the country of residence. There are some important exceptions, like unemployed being able to bring unemployment benefits with them for a period of three months to search for a job in another member country. The coordination regulation does not give migrants rights to non-contributory social assistance schemes that provide means-tested minimum subsistence income.

The key policy challenge is to offer insurance against various adverse events faced by individuals while ensuring flexibility, adaptability, and incentives to be self-supporting via employment. The perspective here is how to maintain and/or repair deficiencies in current welfare arrangements while at the same time allowing for labor mobility and migration. It is beyond the scope of this chapter to discuss the broader design issue related to the social safety nets and tax systems.

The following discusses possible policy steps to square the concerns for welfare arrangements and mobility/migration. We first discuss steps available to national states in balancing 'welfare' and 'labor' concerns. The relevance of these solutions depends on the extent of welfare arrangements in European countries. However, these proposals do not get to grips with the issue of policy spillovers between member states and the problems arising from interaction between rather different country-specific welfare arrangements; problems that may be solved by the more radical move of also making the European Union a social union.

4.5.1 Safeguarding National Welfare Arrangements

Welfare arrangements differ across European countries both in structure and extent, and the following considers some policy options given these differences, implying that policy responses are country specific. Importantly, some of these proposals apply only to migrants from outside the EU/EEA due to the non-discrimination principle for migrant EU citizens. It is implied that measures affecting welfare entitlements for immigrants from outside the European Union also apply to emigrants returning home from a non-EU country.

Entitlement to welfare arrangements can be regulated by waiting periods, that is, by requiring some minimum residence period for individuals to acquire certain social rights. Such waiting periods are also known from the private insurance market and serve to reduce the risk of opportunistic acquisition of insurance when the need is known with a high probability. Waiting periods for social benefits restrain welfare

'shopping', but imply that social insurance for immigrants falls below that of the population at large. As an example, Denmark has introduced a waiting period for full eligibility into the social safety net (residence for seven out of the last eight years; from 2019 nine out of the last ten years), otherwise social benefits are lower (roughly half for a single person). Introducing waiting periods lessens the financial pressure from non-employed immigrants on the social safety net since it may deter immigration, and at the same time it strengthens work incentives of non-employed immigrants. If the reference point of migrants is their living standard in their country of origin, even this lower level of benefit may be considered acceptable. An argument often made in political discussions is whether such waiting periods are fair. A counterargument is that the social safety net is designed to support social integration and equality of opportunities, which is impaired by such clauses on benefit entitlements introducing a divide in the population.

Similarly, eligibility conditions for social benefits depend on previous employment record. This is well known from unemployment insurance (voluntary, insurance based), but may also apply to the basic social safety net. Again, using Denmark as an example, there is an employment condition in the social safety net such that 'full' rights depend on satisfying both a lower limit with respect to working hours within the year, and total employment while residing in the country. Such conditions make the system less universal and create a tie between contributions and entitlements. Again, it may be considered just and fair that the insurance is related to contributions in this broad way. The counterargument is that lack of employment and income is equally problematic for all, irrespective of their employment/residence history.

The issue of the financial burden falling on the social safety net is closely related to work incentives. The classic dilemma is that generous social support for those who have difficulties working and/or have lost their job also implies that the economic gain from returning to work is correspondingly low. This incentive problem can be remedied by workfare or active labor market policies. By introducing such conditionalities in the social safety net, generous income insurance can be consistent with work incentives.[25] Workfare conditionalities have the dual purpose of both being a work test (motivation/threat effect) and aiming at enhancing qualifications of the jobless to improve their job-finding possibilities. This idea applies not only to income-replacing benefits, but also to, say, child benefits. Such benefits may both reduce work incentives and raise issues surrounding the integration of children if they stay at home at critical early ages.[26] Rather than providing child benefits – or other family benefits – unconditionally, the benefits can be transformed into a subsidy in the form of a low (free) price for day-care institutions. Norway, for example, has free child care (20 hours per week for children aged three to five) targeting low-income families, a group with overrepresentation of immigrants from non-OECD countries. Such measures facilitate labor market participation for women and strengthen the social integration of both parents and children.

The financing of education is a particular issue. Most EU countries have extensive public financing (3 to 8.5 percent of GDP). There are several arguments for such subsidies, including capital market imperfections, social background, etc. However, taxation of labor income (especially high marginal tax rates) reduces the incentive to use human capital in the labor market and therefore also reduces educational incentives. This gives an additional argument for subsidizing education to maintain educational incentives (Bovenberg and Jacobs, 2005). While educational subsidies (including study grants and subsidized loans) are redistributive in the short run, they are regressive in the long run, since incomes and education are strongly related. To the extent that marginal income tax rates have been reduced in recent tax reforms (see Section 4.2) and skill premiums have increased, there is room to reduce educational subsidies and thereby make this policy element less regressive.

The emigration issue for highly educated people discussed above is a further challenge if education is largely tax-financed. Increased private financing of education is a possibility, but that may stifle social mobility since the financial constraint is most prominent for youth with a less strong social background. This argument is important at early stages in the educational system, but not for tertiary education. In particular for Master's degrees the argument is less compelling, and subsidies for such degrees are highly regressive. The migration problem associated with education and tax payments for the highly educated can be resolved by notional accounts where educational expenses (e.g., for Master's degrees) are debited during studies, and the account is credited by tax payments while working in the country. Such a scheme would have no effect on the non-migrating individuals, since the notional debt will gradually be reduced by their tax payments out of earned income. However, upon emigrating the balance on the account or a portion thereof becomes an explicit debt. This reduces free riding on the social contract by making implicit debts explicit upon migration.[27]

[25] This also points out that the work incentives implied by social benefits cannot be assessed solely from benefit generosity (effective marginal tax rates, cf. above). The eligibility conditions may play an important role for employment incentives.

[26] Andersen et al. (2019) find that reducing benefits (Start Aid) to refugee immigrants by around 50 percent increased employment for some, but also reduced female labor force participation. Moreover, children's likelihood of being enrolled in childcare or preschool, their performance in language tests, and their years of education all decreased, while teenagers' crime rates increased.

[27] It is interesting that the United States, a country with a lean welfare state and low tax share, retains the right to tax citizens irrespective of residence. Conversely, countries with extended welfare arrangements and high tax share do not retain this right.

A particularly problematic case is the export of benefits like family benefits. Child benefits are exportable to children still residing in the source country if, say, the father is working in another EU country. To the extent that such benefits are instruments to strengthen social inclusion and reduce social barriers for children, the rationale for benefit export has been probed in policy debates. A number of countries – Austria, Denmark, Germany, the Netherlands, and the United Kingdom – have questioned whether EU rules are too lax. Since the level of family benefits is determined by living costs and standards in the destination country, the real value in the source country may be much larger than in the residence country. As a response to this, Austria decided to make family benefits paid for children residing in another member state dependent on the costs of living in that particular member state. In response to this, the European Commission has launched an infringement procedure, since this step is seen as breaching the EU rules on social security, in particular the principle of equal treatment of workers who are nationals of another member state. While the financial burden from export of such family benefits is modest, this has been a showcase of EU rules going too far at the risk of undermining support for the single market.

A more wide-ranging step is to change the social contract underlying tax-financed welfare arrangements from being implicit to being explicit. As discussed above, the implicit social contract has some advantages in terms of insurance and redistribution, but it is vulnerable to mobility and migration. This problem can be remedied partially by making the contract quasi-explicit. Norway is an example of a country with an explicit membership requirement for social insurance (national insurance scheme).[28] Individuals born in Norway become members automatically, and immigrants can become members if they are resident for at least twelve months. It is possible to maintain membership (at a reduced contribution rate) if living abroad. A number of other countries have similar arrangements for social insurance, e.g., the "Caisse des Français de l'Étranger" in France. Such membership models can be interpreted as an extensive linking of entitlement and contributions in the sense of the overall 'membership' of the social contract while still maintaining a decoupling of entitlements and contribution at the individual level. For immigrants, the membership model is like a waiting-period model, but this scheme has the advantage that it can handle the return of emigrants more flexibly.

4.5.2 Social Europe?

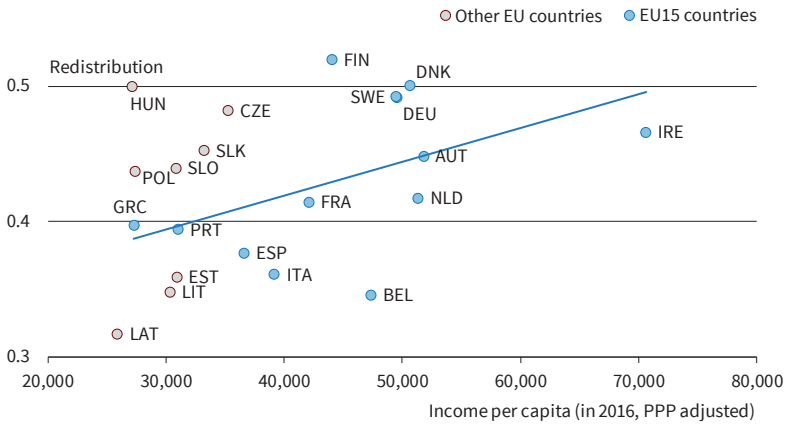
The current European Treaties rules out supranational legislation for the most important elements of the member countries' welfare states and labor market regulation (Bertola, 2015). Article 151 TFEU states as aims "the promotion of employment, improved living and working conditions, so as to make possible their harmonization while the improvement is being maintained, proper social protection, dialogue between management and labor, the development of human resources with a view to lasting high employment and the combating of exclusion." However, it explicitly forbids "harmonization of the laws and regulations of the Member States" for social protection schemes, where only cooperation, knowledge sharing, and exchanges of information are envisioned. And it disallows even that "open method of coordination" (requiring member states to report on jointly set, verifiable, regularly updated targets, see Van Rie and Marx, 2012) for "pay, the right of association, the right to strike, or the right to impose lockouts" (Article 153). This has made it impossible to achieve the same regulatory harmonization implemented by the 1987 Single European Act, which by removing unanimity requirements allowed formulation and enforcement of proper regulation in the single market for goods by 1992. That Act and the Treaties retain unanimity for taxation, free movement of persons, and workers' rights outside of specific fields such as health and safety and equality between women and men.

It is not difficult to see why member states were and remain reluctant to forgo policymaking power in the social and labor policy area. As illustrated and discussed above, the structure and generosity of their welfare states are very different. The areas for which the treaties envision only non-binding monitoring and comparison procedures are those where national histories and traditions resulted in very heterogeneous 'models of capitalism', where differently developed markets interact with different policies. Employment protection, unemployment insurance, collective wage bargaining, and legal minimum wages complement or substitute each other in pursuing policy objectives that are very important to all European countries, but targeted with different instruments. Besides history, the current level of economic development is also an important source of heterogeneity, as illustrated in Figure 4.9, which plots the relationship between inequality reduction through redistribution and per capita income levels: richer countries tend to redistribute more, plausibly because it is easier to bear the cost of reduced incentives to work.

Heterogeneous countries do not want to implement policies that are politically or economically unsuitable for them. Of course, this problem is relevant in all policy areas, including monetary policy, and not only across but also within countries, where regions and cities have to trade some inconvenient policy uniformity off against the advantages of broader social and economic interactions. Social policy is, however, much more explicitly redistributive than monetary and most other policies, hence even more problematic in the absence of a suitable political decision process.

[28] See NAV (2019), Membership of the National Insurance Scheme, https://www.nav.no/en/Home/Rules+and+regulations/Membership+of+the+National+Insurance+Scheme.

Figure 4.9
Extensive Margin: Effective Tax Rate on Entering Employment



Note: Per capita income measured in US Dollar at purchasing power parity. Redistribution is defined as in Figure 4.2. The line plot is a linear regression for the EU15 countries (excluding the United Kingdom and Luxembourg).
Source: Eurostat and EEAG calculations.
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4.5.2.1 The Problem

It is also not difficult to see that the same logic that lends support to the single market (and a single currency) also supports a single social policy framework. That logic is very old, even though its application to Europe dates from only a few decades ago (Bertola, 2007). In Part II of Chapter X (Book I) of the *Wealth of Nations*, under the still very topical title "Inequalities Occasioned by the Policy of Europe," Adam Smith points out that integrated markets and the resulting price and wage equalization are more efficient than isolated economies. He notes that equalization of factor prices can be and was in his time prevented not only by market entry barriers (such as mandatory rationed apprenticeship) but also by social policy. In England, limited mobility of ordinary workers was in his view explained by the parish-based welfare system of the Poor Laws, which made it difficult to migrate for those thought likely to apply for subsidies. There and in every other European country, national welfare schemes subsequently replaced traditional risk-sharing in extended families and local communities, and made it possible for internal migration to build integrated, industrialized, and urbanized advanced economies.

An area of markets as well integrated as they aim to be in the European Union should also build an integrated social policy framework. In the current EU policy framework, migration is unrestrained by policy, and the right of citizens to obtain welfare benefits is enforced at the European Court of Justice level even as policy choices are left to member states. This generates the tension, reviewed above in this chapter, between market integration and political desires to preserve and restrict access to country-level welfare benefits. Just as uncoordinated macroeconomic policies, fixed exchange rates, and free capital mobility were mutually inconsistent before the Economic and Monetary Union, it is impossible for free mobility, local social policy, and effective social protection fully to coexist.

The three members of that inconsistent trinity currently coexist and evolve uneasily in the European Union. Over time, it has become possible for member countries to impose minimum wage and working condition standards on foreign workers who are posted to their territory or (like truck drivers) work there temporarily. Individuals can work abroad for up to two years while remaining attached to their country of residence's social security scheme: this provision makes it easier for workers to move and fosters labor market integration, but it can hinder mobility when implemented in unduly restrictive ways. As in Adam Smith's depiction of Elizabethan England, so in the EU those countries (such as Austria and France) that resent international competition and/or would like contributions to be high everywhere have recently begun to impose stiff fines on individuals (such as German businessmen and academics) who perform labor services without holding a valid A1 certificate of social security entitlement. Fortunately, modern information technology makes that certificate rather easy to obtain.

4.5.2.2 What Should Happen?

While average income differences between countries are not always larger than those across regions within a country, they are certainly large enough to make it unthinkable to implement across the whole European Union welfare schemes as homogenous as those of each member state. But social policy does not need to and should not be as uniform as monetary policy, because people do not move as quickly as financial market participants. It can remain diverse across countries, and even within them it should reflect local specificities. Even as it strives to adapt to local conditions, however, policy should be structured in such a way as to provide appropriate incentives to local policymakers. Policy always has to trade its objectives off against the moral hazard and efficiency losses that are unavoidable under incomplete information, but will fail to achieve even the feasible second best when it is not coordinated across policymakers (Sinn, 2003).

In each country, social policy pursues objectives that are conceptually distinct, if intermingled in practice. One is that of expressing solidarity (or, more pragmatically, of preventing social unrest) by helping ex ante poor individuals who live in the same society.

The other is that of promising insurance against future individual shocks. As discussed above in this chapter, both objectives become more difficult to target when individuals can move across the confines of the relevant policies. It is sensible for a society to educate, train, or at least passively subsidize disadvantaged individuals it has to interact with; but if the poor can be dumped out of sight, it may be tempting to spare the expense. All individuals, no matter how ex ante advantaged, appreciate protection from bad luck; but participation in insurance schemes needs to be mandatory and permanent, because it will be unappealing for ex post lucky individuals, and cannot function if those individuals can opt out of contributions by moving. As uncoordinated policymaking tries (and, in equilibrium, fails) to repel the poor and attract contributors, policy becomes ineffective everywhere.

To preserve social peace and social insurance as well as unfettered mobility, policy does not need to be fully centralized, but does need to feature clear rights and obligations for decentralized policymaking and for individual labor supply and mobility choices. Reforms in each country can accommodate mobility if they are complemented by explicit coordination and supranational instruments aimed at preventing detrimental policy competition. When the poor can move, it is in everybody's interest that they be treated well everywhere. To prevent social dumping, it would be advisable to enforce minimum welfare benefits, co-financed centrally and set at levels compatible with suitable work and mobility incentives within and across differently developed areas. To preserve feasibility of unemployment benefits and pension schemes, these should be mandatory but structured in such a way as to exclude ex ante redistribution: actuarially fair linkages between individual contributions and portable pension rights would need to be enforced in all EU countries, and would not require central funding.[29]

4.5.2.3 What Might Happen?

The path from the current situation to a sensible configuration is long and difficult, but might yet be traveled. The electoral success of anti-migration populist parties makes it increasingly clear that market integration is more likely to be forgone than social policy setting power or effectiveness, and all other parts of the political spectrum have recently shown keen awareness of the need to try and implement European labor market policies. According to French President Macron, "Europe, where social security was created, needs to introduce a social shield for all workers, guaranteeing the same pay for the same work, and an EU minimum wage, appropriate to each country, negotiated collectively every year." European Commission Vice-President Timmermans called for each EU member state to have a minimum wage equivalent to 60 percent of its median salary. The incoming Commission President von der Leyen's political guidelines want to "move away from unanimity [...] for social and taxation policies" and envision a "European Unemployment Benefit Reinsurance Scheme" that will "protect our citizens and reduce the pressure on public finances during external shocks."

Political and technical issues are also increasingly clear, however, and many devils lurk in the unspoken details of recent political positions and policy proposals. Regulation of wages is appealing as an apparently inexpensive way to help the deserving poor: who could be against equal pay for equal work? Minimum wages are a very blunt tool, however, and their redistributive implications make them controversial. If the labor market pays low wages for any reason, imposing higher wages without increasing expenditure on education, training, or non-employment subsidies tends to price out some labor, with strong (if appealing for middle-class workers) redistributive implications as they reduce capital and land returns and benefit employable workers. Wage floors concentrate such effects in specific regions of large heterogeneous countries, and would also have different effects across countries in the European Union. Poor people in poor countries gain from integration, because their low (if rising) wages make their labor competitive in the integrated economy: a binding minimum wage in poor countries can price them out, and favor competing workers in richer countries.

As to European Unemployment Insurance, a variety of schemes have been considered (notably by the 2015 Five Presidents' report; see Berlavy, Marcon, and Maselli, 2015, for a detailed review and references). They are appealing because they are technically not fiscal instruments but can potentially work as an automatic, non-political cyclical stabilization tool that can prevent self-fulfilling public finance spirals and need not result in permanent transfers. The reinsurance terminology suggests that the scheme would continue to be designed at the national level, and financed only when needed by yet to be determined supranational funds. Because the level of unemployment depends on benefit generosity and conditionality, the scheme could link supranational subsidies to changes of unemployment rates. While this would not remove the need to harmonize and supervise national policy reforms, it would help insurance buffer country-level permanent shocks. Of course, most shocks occur at the level of sectors, regions, and occupations, and the insurance scheme should ultimately aim to stabilize the welfare of people, not just the budgets

[29] Bertola et al. (2001) discuss these theoretical insights in more detail and discuss the much less generous but more mobility-consistent welfare arrangements in the United States, where the federal government was originally tasked with ensuring freedom of interstate commerce but over time came to regulate and co-finance welfare provision schemes administered at the state level, and to administer Social Security. The United States also shows that fluid markets and easier personal mobility can accommodate very different policies, and allow individuals to "vote with their feet" in search of social arrangements that suit their preferences.

of member states. A direct EU-based scheme (such as the one simulated by Dolls et al., 2015) would do so more directly and, like Social Security in the United States, would usefully put remote European institutions in direct contact with European citizens.

It remains to be seen whether political intentions will develop into some first steps towards a coherent policy framework, or will just offer opportunities for misunderstandings and disagreements. Poor member states can see minimum wages without internationally co-funded benefits as a tool meant to price out their workers and protect the national interest of rich member states. What is clear is that unemployment insurance would be difficult, and minimum wages impossible, to enforce with supranational legislation. Enhanced cooperation would be hard to design and justify under the European Treaties currently in force. Treaty revisions might in the future allow qualified majority voting and co-decision on some of such policies, but it is hard to envision an agreement to do so for unemployment insurance and/or minimum wages in isolation. It would be both technically and politically very difficult, but necessary, to design and implement a labor and social policy framework as comprehensive and wide-ranging as that which made it possible to enact the single market for goods and, to a much more limited extent, for services, which, like employment, feature stringent and politically controversial regulation.

4.6 CONCLUSION

Increased mobility of jobs and workers/people is of importance for the design of the tax-financed welfare arrangements. Globalization and technological changes create winners and losers, influencing the need and scope for collective insurance and redistribution, but also the scope to tax-finance such arrangements. Ensuring a fairer distribution of the gains and costs is essential to maintaining political support for economic integration.

The policy scope – especially in relation to the design of the social safety net – depends critically on whether it is mobility and migration within the European Union or between EU and non-EU countries. Within the European Union, the single market and the principles underlying social security coordination, in particular the non-discriminatory principle, restrain the possibilities of differentiating benefit entitlements, while the scope is larger with respect to mobility/migration of non-EU citizens.

Policy responses pertain to both the revenue and the expenditure side. Developments over recent decades show that differences in welfare state arrangements have persisted, and that among the best performing economies there are some countries with lean and some countries with extended welfare states. This shows that the scope for national policies with respect to the design of welfare arrangements is largely intact. This does not imply that external factors do not matter, but they are not an either-or issue.

The main source of tax revenue accrues from the direct and indirect taxation of earned income, and increased mobility may drain tax revenue. Shifting taxation from mobile to less mobile tax bases is a solution to these pressures. It is also possible to maintain progressive elements in taxation, while it may not be possible to change the top statutory tax rates, by focusing on the definition of tax bases and tax exemptions, in particular for capital gains.

The mobility/migration issue in respect to taxation mainly pertains to (very) high-income groups from whom taxes are of major importance and access to welfare arrangements of marginal importance. For these groups, taxes matter more than the entire package, and mobility is an issue. Identical tax rules for all are considered fair by most, but may induce emigration and loss of tax revenue. A difficult policy choice arises. A general reduction of taxation (less progressive income taxation) reduces the problem but has significant effects for tax revenue and also redistribution. Maintaining taxes leads to possible emigration, which may also reduce tax revenue, and may be seen as a signal that the country is unattractive to the successful. An intermediate solution is to grant tax exemptions to particular groups of emigrants. Such a step addresses only the emigration side of the problem, and not the immigration side. A number of countries have resorted to such tax exemptions in recent years, targeting either relatively broad groups in an effort to increase labor supply (countering the effects of an ageing population) or narrow groups to attract the talented or superrich. Such policies are impossible to control under the current EU institutional structure, which puts fiscal matters firmly at the national level, but can dangerously trigger race-to-the-bottom mechanisms within as well as outside the European Union. As a first step towards building a consensus to regulate such policies, these developments should be closely monitored at the EU level, where information should be regularly collected on taxation schemes that facilitate tax avoidance and trigger tax competition.

Turning to the expenditure side, there are substantial differences across the main expenditure types. Starting with education, we focus on tertiary education, which is heavily subsidized in most countries (study grants, no or subsidized fees). As discussed above, such policies are regressive in a lifetime perspective, and with increasing skill premiums they also reward the winners. While there are substantial arguments for subsidizing primary and secondary education to ensure equal opportunities and use of the human capital potential in the population, this argument is less compelling for tertiary education – especially at the Master's level. Barriers to education set in at much earlier ages. Moreover, the return from tertiary education has a large private compo-

nent. Educational subsidies can be reduced in various ways. One is to substitute state-guaranteed loans for study grants; this also reduces the extent to which emigrants can free ride on tax-financed education. Such a change is consistent with maintained incentives for education, and it improves public finances and reduces regressive policies.

For tax-financed pensions, the pro rata principle ensures that pensions are proportional to the length of the working period in a given country. This reduces burden shifting between member states in the case of migration, and ensures that all are entitled to some minimum pension. Funded pension arrangements are exportable, and there are no formal barriers in this area. However, a huge problem of transparency and information remains. While the general principles are simple, there are a vast number of details in specific pension arrangements on contributions, benefit entitlement, benefit levels, taxation, etc., and they differ across countries. This is an impediment to mobility and makes it difficult for workers to assess whether their future pension entitlements are adequate. Within the European Union, there is a great need for improved and easily accessible information such that mobile workers can gain an overview of the pension implications of mobility.

Events during working life that affect people's ability to be self-supporting – like unemployment and sickness – or cause specific expenditure needs – like medical treatment – are more difficult to handle. Insurance coverage can in many cases be unclear for the individual due to the variety of systems prevailing across EU countries. Unemployment insurance is mandatory in some countries and voluntary in others; some countries have public health coverage, others have mandatory contributory schemes, and in some countries insurance is tied to specific jobs. From the individual perspective, there is an issue of coverage adequacy. From the single-country perspective, it is an issue of who is responsible and should cover the costs.

Waiting periods – also known from private insurance markets – are a way to protect national welfare arrangements from 'welfare shopping'. Waiting periods can be defined in terms of a period of residence or employment. Such measures come at the cost of less insurance for those who actually immigrate – possibly also returning emigrants.

Exportability of benefits is a controversial issue; child benefits, in particular, have been heavily debated, since they are paid by the destination country of workers even for children who remain in the source country (e.g., one parent moves to work in another country, and the other parent stays in the source country with the children). While the financial side of this problem is not large, it has become a symbol that the 'labor' view has taken prominence over the 'welfare' view in EU policies. This particular element is considered unfair by many. One solution for child benefits – and in principle other benefits that can be exported (e.g., disability benefits) – is to index the amount to living conditions in the country in which the child is living. This prevents the real value of the child benefits from being out of proportion with the living standards in a particular country, and ensures the child allowance does not distort mobility (in some cases employers have used such access to child benefits as a recruitment argument). When the level of social benefits – like child benefits – aims to ensure adequacy in a given environment, the proposal to index such benefits to the living costs in the country of residence makes sense. Without such a solution, countries may resort to less obvious and more undesirable solutions or measures.

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