

The Political Economy of Labor-Capital Income Imbalances European Solutions

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Abstract

The EU economic and social model has for long been put under pressure, especially after globalization accelerated. Standard techniques to gauge the trend like labor's share of national income support the hypothesis globalization and income redistribution are negatively correlated. In the open EU economy, global increase of labor supply causes relative price of labor to shift (fall). This trend is expected to last in the upcoming decades because of the ongoing integration of China, India and other emerging economies into the global economy. At the same time technological progress is benefiting skilled labor. New technologies require skill improvements and better education. Hence the relative income position of the high skilled was improving.

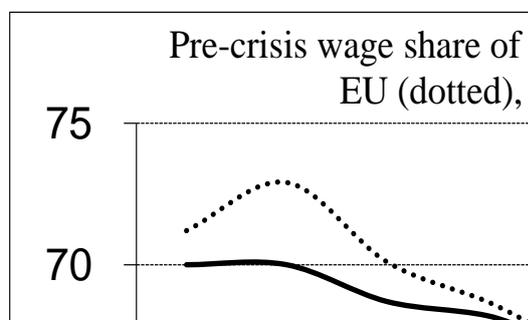
To accommodate both effects trade related and technology related policies would deliver: First, do not impede shifts in specialization (economic aspect). Help the affected to find a new job in new industries (social aspect). Second, improve human capital to avoid competition with low skilled labor abroad. Education and training allows for escaping from low pay to better paid jobs.

Income divide in the EU – a stocktaking

People have always dreamed of social justice and equality. Thomas More had imagined a land, Utopia, fulfilling these virtues. But the dream never came true. Worse, the developing industrial revolution caused traditional social structures to disappear and the term Manchester capitalism was coined. It stayed for grave material deprivation of the working class and for social divide. Fortunately, later things changed to the positive. Especially in continental post World War II Europe, a new system called social market economy broadened the distributive role of the state and narrowed the income gap between workers and owners of capital. It was considered the right model keeping society together by avoiding social cleavages.

However, as of the mid-seventies of the 20th century that positive trend started to reverse. Owners of capital have been enjoying ever growing shares of GDP – at the expense of workers, whose share of national income has been steadily declining (see Graph 1).

Graph 1A:



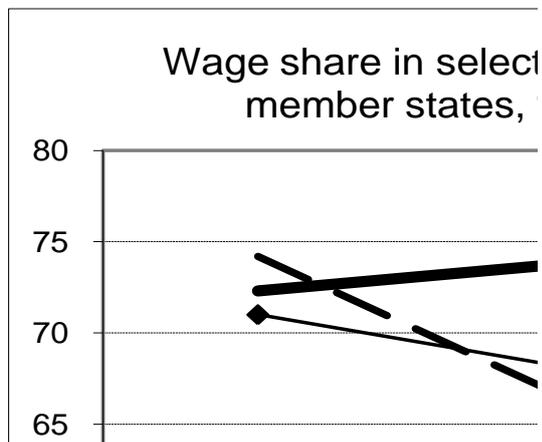
Source: Eurostat

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That development is even more worrisome given that, in the long run, labor productivity and capital productivity in the European Union and in most OECD countries have been moving in opposite directions: the former growing, the latter stagnant or even falling. Also, the net capital-to-GDP ratio has in the last decades been almost constant while employment has risen. All in all the result should have been an increasing or at least constant labor's income share of total output (GDP) and, what is the mirror picture, a smaller, or constant, share of capital income in it. Yet the data show that is not the case; therefore there must be forces in place preventing the economy from returning to balance.

Perversely, in some cases the opposite trend emerged: in UK, labor's share was growing. Here the exorbitant income gains in the financial industry caused the anomaly (Graph 1B). Moreover, the trend of falling labor income share, although prevailing, (beside UK, Portugal's labor income share has risen between the mid 1960s and mid 2000s) it has shown up differently by country. As an example, in Sweden, the decline has been less strong than in France, and so on.

Graph 1B



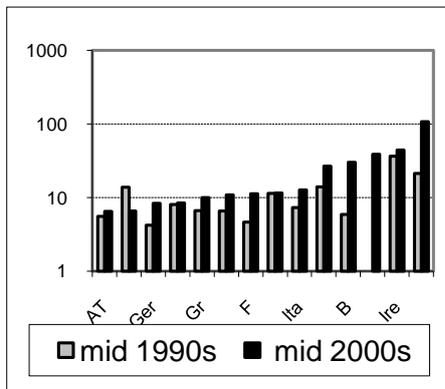
Source: Eurostat

Labor's income share depends mostly on the wage rate and the employment rate; hence if labor productivity growth is high, labor income growth may outperform the capital income growth elevating the standard of living of employees. Other combinations are possible too – for instance an expanding employment may shift the labor income share upwards even if wage rates stay unchanged, and so on. The curves shown in Graph 1 do not reveal how the wage rate in the EU and US has performed. However, the principal truth is the income distribution has shifted - benefiting the owners of capital and hurting the owners of labor, i.e. employees. But given that in the last four decades the employment rate has increased on both sides of the Atlantic the next daunting conclusion is the (real) wage rate has been trailing the labor productivity growth. Across the whole group of employees ever smaller fractions of national income have been distributed. Within the employees' sample there have been bottom-top shifts, meaning earners of higher income have improved while low pay work has spread further. The outcome has been an income divide in two directions: First, between labor and capital income, and secondly, within the group of labor owners itself. Some segments of employees' households deteriorated in terms of their income relative to others and a perception emerged there is a growing number of working poor not able to make ends meet despite being employed.

One might play down that development while pointing out that wages constitute only part of the overall income of households. Other parts are rental income, net interest, gains on stock price increase, social benefits by the government, and other sources of income. These other parts of income may make up for a dwindling wage; the income level of the respective individuals may even improve. Yet that has not been the case in the European Union during the last few decades; the share of population receiving capital income (profit) has declined in the EU and in most member states as well. Because capital's share of total income has increased at the same time, a further concentration of income and wealth in the hands of a smaller, yet richer group of people has taken place in Europe (Western and nowadays Eastern Europe as well). Again, there is a flip side of that trend: as labor owners' share of population has risen, up to some 45 percent by mid 2000s, a shrinking (relative to GDP) gross wage sum is to be distributed among more workers. That leaves many of them with a stagnant or even declining real wage.

Combining a smaller capital owners' share of total population with a growing profit share of total income yields a so called profitability index per capital owner. It can be calculated across the Union and by member state; a rising profitability index indicates wealth concentration is deepening. Indeed, that had happened in the last period starting in the nineties, see Graph 2. (Only UK is an exemption with a profitability index falling. The anomaly is explained by the same phenomenon as regarding the capital-labor income share trend: in UK, high paid employees in the financial sector have expanded their income benefiting from risky but tempting financial instruments).

Graph 2: Profitability index* in EU



*Profit share of total income calculated across self employed excluding social transfers by the state; logarithmic scale. Source: Eurostat Online

Such a trend is apart from its ethical content economically problematic because a yawning income gaps can cause growth to slow down (Barro, 2008).² Since many households are financially constrained they would cut back on consumption demand and thus have the economy to stagnate. Moreover, the rich and superrich tend to save a larger part of their income compared to the less wealthy, who spend almost all of it. With a domestic demand sluggish, the output growth may flatten triggering further nasty implications like less

² Barro has used long term Kuznets-Curves to study the case. Although he does not conclude exactly the same he has constructed curves featuring an inverse U-form. That may indicate growth can negatively depend on increasing inequality. See Robert Barro, Inequality and growth revisited. Asia Development Bank, Working Paper Series on Regional Economic Integration No. 11/2008, http://aric.adb.org/pdf/workingpaper/WP11_%20Inequality_and_Growth_Revisited.pdf

employment, budget deficits, inflation, and others. Another channel to slow down the economy is the desire of the households to keep their consumption in the long run constant. Then in the case of shrinking labor income they would save less thus reducing the saving rate of the economy. Less saving may push up the interest rate while discouraging (growth relevant) investment. But the weaker the GDP growth, the serious the redistribution constraints - a vicious circle hurting the less affluent.

A stable link between the decline of labor income share on the one hand and a decline of the saving rate on the other in Europe has been observed in the long-run. Although causality is yet to be proven, the sketched negative implications shouldn't be easily dismissed.

Understanding income inequality: globalization versus technology

The unsettling tendency towards undesired labor-capital income redistribution in the EU has deteriorated the social status of European employees in the last decades. Then the question arises what is the reason for it. To start with, there is a distinction between structural and cyclical aspects: if the economy is in a downswing, labor's share of income may fall. Yet the following upswing would make up for the loss and over the business cycle the ratio of labor income to total income would not change. If it wouldn't, the cause might be a wrongdoing on the side of policy makers or whatever policy errors. They could (easily) be addressed to restore balance. Not so if there are structural reasons in place: usually they are hard to deal with.

That is relevant in terms of international trade or, as more generally perceived, globalization. Does globalization accelerate the shift in income distribution between labor and capital? International economics sees relative factor price in relation to relative factor supply at the core of the above described trend. Regarding the wage-interest ratio in the economy the bigger the supply of one factor, the less its compensation relative to the other. Up to the mid seventies in most Western European countries the labor supply was limited while the so called capital deepening was the foremost important factor of growth. Workers were in a comfortable position of being supplier of a scarce factor of production, labor, which left them with relatively high (labor) income. The opposite is true in countries with a small capital stock and an abundant labor supply. Workers there are relatively, even absolutely, poor, while capital owners are in a strong position in terms of their income relative to the average.

In the European Union, globalization in general and extension to the East in particular have made the old pattern to change. The European Central Bank came to the conclusion the capital-labor-ratio of the world economy has fallen by two third after most emerging markets and Eastern Europe opened up to trade and started liberalization (Bauman et al, 2007).³ Not just the emergence of China, India, Brazil and others but also of Poland, Hungary and all the rest of the new member states of the EU have significantly enlarged the labor supply in Western Europe. In the wake of it the relative price of the labor factor has changed downward. Because factors are paid to their marginal productivity the oversupply of labor

³ Before the big emerging markets opened up to international trade the global K/L index was determined by the group of Western industrialized nations alone. After the opening up the K/L ratio declined. See U. Bauman, F. di Mauro: Globalisation and Euro Area Trade. Interactions and Challenges, ECB, OP Series No. 55, March 2007, Chart 4, <http://www.ecb.int/pub/pdf/scpops/ecboep55.pdf>

may translate either into falling wage ratios or into increasing unemployment. This does not come as a surprise given the fact the emerging economies are abundant with low skilled labor. It is vastly employed in the export sector and its supply has almost quadrupled between 1980 und 2005: from 200 million to roughly 750 million, and it is further growing (Jaumotte and Tytell, 2007). While durable goods and quality services produced with cheap labor input makes them affordable for more and more consumers in the West, the drawback is a significant pressure on the labor income of the low skilled there. Now they are supposed to compete with low paid colleagues in other, poorer, parts of the world.

The fact that since the 1970s many industries – textiles and apparel, audio/video electronics, sportswear and others have ceased to exist in Europe or have moved to other parts of the world seems to confirm the explanations of the trade theory, especially Heckscher-Ohlin (Schumacher et al, 2007). The European Union has steadily expanded its involvement in the global economy with export and import ratios today much bigger than 20 years earlier. That was helpful: narrower specialization and concentration on items allowing for more comparative advantage have helped to keep terms of trade unchanged, despite higher energy and commodity prices.

The Union as a whole has been able to withstand the pressure on the import side by fast growing Asia and other world regions. What is relevant for the income shift is that intermediate goods are mostly imported whereas in the past they were produced domestically. A second side effect of the new trade and input pattern is that European exports now depend much on imports from non-European partners – currently some 44 cent of each euro exported (IMF, 2007). A self acceleration process is set in motion: more specialization in high tech goods and services requires ever growing imports of medium and low tech goods and services. The European Central Bank believes the share of such imports of the total import entering the Union has surpassed 50 percent, making the North-South trade pattern vital for Europe (ECB, 2008). That is a reason for growing concern on the side of the trade unions and other social groups who have been vociferously critical of the process of opening up to trade. Mostly the critique is going to the intensive offshoring and outsourcing of traditional industries; however, that critique tends to exaggerate the negative effects on income and employment. Inputs from off-shored low tech sectors do not play a significant role; also their share of the total has remained stable during the last 20 years (Jaumotte and Tytell, 2007).

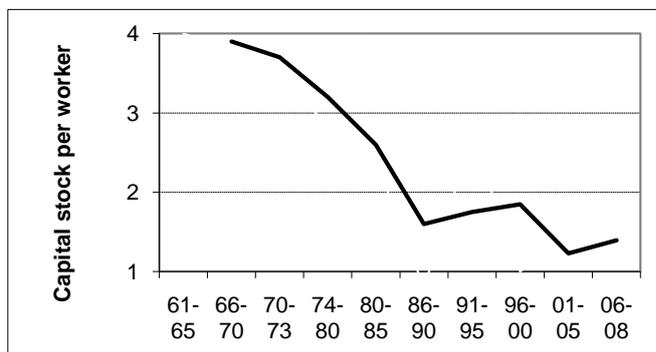
That would not be the case regarding goods that contain more skilled labor input. Export price growth in the new member states of the EU has outperformed the growth rate of their unit labor cost indicating a gradual shift towards high-tech exports. The same can be expected with regard to China, India, Brazil and others. Across the globe, the now prevailing vertical trade pattern would be replaced by a more horizontal one that is resting on the exchange of goods of comparable quality – autos, computers, high-tech logistics and other high-end services. The outcome would be that the restructured global trade will have to be accommodated by rearranging the labor market structure in Europe. Precisely, now the higher skilled are about to feel the pressure. Gradually the share of outsourced high skill labor has surpassed the share of low skilled one (Jaumotte and Tytell, Graph 7). The reason is Western Europe has specialized in capital intensive high-quality goods requiring much research and development spending. At the same time the successful export sector does not employ many low skilled; therefore outsourcing only pays-off by cutting on the stock of high skilled.

While globalization has moved to the center of the explanation effort why income inequality in (Western) Europe is on the rise, there are alternative views, mostly related to technology.

Technological progress is seen as a main driving spring behind the phenomenon of capital-labor distribution shift in modern economies. In phases of technological change as it occurred during the industrial revolution or at the beginning of the last century with electricity and diesel engines replacing steam power, the “first-mover” effect has kicked in. It has given innovative companies a competitive edge and thus extra revenue. On the macro level, as long as they can keep ahead of their competitors, those additional revenues would translate into increasing capital’s share of total income. More recently the same pattern merged with the new ICT revolution leaving the best performers with extra revenue and the whole economy with a capital’s income share shifting upward. In the old member states of the EU this is empirically corroborated by the so called wage-interest paradox. Here the long-term (benchmark) interest rate has been falling within the last few decades – from real 4.6 percent in the nineties to just 1.6 percent on the eve of the financial crisis. At the same time there has been a slow but steady increase of the real wage rate – on average 0.95 percent per year during the last 15 years (EU COM, Autumn 2007). That would have caused - other things unchanged - labor’s income to grow faster than the capital’s income, what has not happened. Then the assumption would be the “new economy” has allowed innovative companies to cash in revenues far above the average return on investment in the economy thus improving the relative income position of capital owners.⁴

But even if innovation is ignored the technology hypothesis seems convincing if looking at the interaction between the relative supplies of capital and labor. In the EU (old member states), net capital stock growth has been slowing down since the 1960s while employment has grown faster. The capital stock growth slowdown is attributed to the larger portions of replacement investment. Therefore net investment has become smaller, allowing only for capital stock growth at snail’s pace. The result has been a declining capital intensity growth starting back in the 1960s and up to the global crisis, see Graph 3. According to the Stolper-Samuelson effect, with capital-labor ratio sinking the wage-interest ratio will sink as well, causing the purchasing power of employees to fall relative to the purchasing power of capital owners.

Graph 3: Capital stock* per worker in EU (old member states), percent year on year change 1961-2008



* Net. Source: EU Commission

⁴ Otherwise capital owners would have improved their relative income position because of an increased capital stock. That is empirically yet to be proven: the capital stock-GDP ratio has been for years stagnant in the EU. But an upward shifting profit share while interest is down would only occur in case the capital stock is significantly growing.

The technology hypothesis goes along the research outcome on trade and globalization; therefore it looks like either is providing evidence, although mixed, when it comes to income distribution. Lacking a clear-cut causality apparently applies not only to the European Union but also to the US (Lawrence, 2008).⁵ That might become even more puzzling given that more catching-up economies develop sector patterns increasingly resembling those of rich nations. China, Brazil and many new member states of the EU meanwhile feature large capital stock that is supporting their steel, auto and heavy industrial sector. The result might be, in the future, a reversal of the current trend towards a larger capital's income share of total income in Western Europe. At the same time, because of the shift in favor of research intensive sectors there, the skilled workers' share of total employment might increase causing labor income to improve relative to capital income, and so on.

The conclusion is then, the reason why the purchasing power of employees shifts relative to the one of capital owners is multilayered and trade and technology related factors are intertwined. The pattern is even more confusing while looking at the growth accounting of the EU which is universal for open and closed economies. In the long run, between the early 1960s and up to the financial crisis, labor productivity growth has trailed capital intensity growth (while the relative contribution of total factor productivity, TFP, to productivity growth has increased). Employment rate has expanded as well. That would have caused a falling capital's income share and an increasing labor's income share of total income. Yet because of the opposite empirical evidence the assumption would be compensation of labor has fallen short of matching marginal productivity.

A tool box centered on the standard Cobb-Douglas production function

$$\alpha = (\ln y - \ln A) / \ln k$$

is employed. Indicators are on per-worker basis. If factors were paid to their productivity, α would be falling whereas $(1 - \alpha)$ would be increasing, as Table 1 proves. Also, because

$$(1 - \alpha) = w(N/Y) = w/(Y/N),$$

if labor had been paid to its productivity, real unit labor cost and therefore labor's income share would have stayed constant instead of having declined.

The assumption is then an oversupply of labor has kept wages below equilibrium, or what is the same, real wage growth has lagged productivity growth. Hence, globalization is envisaged again: oversupply of labor in the global economy has pushed labor markets in Europe off-equilibrium (Table 1).

Table 1: Theoretical capital income and labor income ratio in EU15 by time periods, percent of national income

	Capital income ratio	Labor income ratio	Labor productivity y-o-y growth, %	Capital intensity y-o- y growth, %	y-o-y TFP, %
1961-1975	36	64	4.0	3.6	2.7

⁵ More recent studies on the USA assign trade a less prominent role. See R. Lawrence, Blue Collar Blues. Is Trade to Blame for Rising US Income Inequality? The Peterson Institute for International Economics, Washington, 2008.

1976-1990	35	65	1.9	2.0	1.2
1991-2008	33	67	1.6	2.1	0.9

Own calculations. Source: EU Commission

Also, it should be born in mind that price elasticity with respect to demand for factors may shift no matter the economy is open or closed because it depends on the technology based substitution between factors. Yet international trade may affect the supply of a factor by expanding/reducing it, thus depressing/raising its compensation and therefore lowering/increasing its share of total income.

Twenty and more years of intensive research on the causes of labor's income share deterioration in the European Union have fallen short of bringing up a final clarification. Some studies put forward the technology view, since expanding demand for high skilled labor and the subsequent worsening of the purchasing power of the low skilled in Europe isn't consistent with trade theory (EU COM, DG EcFin and EU COM, DG DG Employment and social Affairs, 2005). But the technology focused explanation is empirically not impeccable either. Especially the assumption New Economy has pushed up the income of skilled employees making unskilled workers relatively (and in some cases absolutely) less well-off is not convincing. A hundred years back, as electrification and mechanization raised productivity in the US and most other Western countries, the high skilled-low skilled income gap remained broadly stable (Goldin and Katz, 1998). Why this has changed later is yet to be understood. Some observers believe it is the technological progress that reduces the value of new capital stock making this way more skilled labor affordable (Krussel et al, 2000). Indeed, in the old member states of the EU the wage share of the high skilled has risen faster than the capital's share of total income. At the same time research results conclude the very level of education is the foremost determining factor behind the trend of income divide among various groups of earners (Cholezas et al, 2007).

To sum up, what matters is the outcome, not so much the cause. This is better understood from a historical perspective: the current situation of an ongoing decline of labor's share of total income – be it due to technological changes or globalization – hasn't been always the case. Back in the 1950s and 1960s, as Western Europe was rebuilding its capital stock that has been destroyed in World War II. Investment in productive capital has resulted in capital becoming - relative to labor - less and less scarce, making labor's share of national income expanding. At that time the standard of living of owners of labor – workers, employees – was picking-up and producing satisfaction with the European model of social market economy. Later, especially as globalization and New Economy stepped in, that reversed: European companies felt the pressure to economize on labor, forcing them to shed jobs and to move industrial sites overseas. Moreover, now Europe is increasingly faced with a so called UK-paradox. Deindustrialization and structural changes in favor of the services sector, and here of the sector of high-pay investment banking jobs have shifted the relative income position of medium and low skilled workers. As visible in Graph 1B, in UK the share of labor has increased.⁶ But on average, the income position of most employees hasn't improved. Net of the contribution of the City of London owners of labor in UK have felt the pressure by

⁶ In continental Western Europe capital stock growth has outperformed GDP growth between 1960 and 2006. In UK the opposite is true (3.2 and 3% p.a., unweighted average of 6 countries, and 2.3 und 2.5% p.a. respectively). Source: EU-Kommission

globalization and technological change as much as in most continental member states of the European Union.

Policy response

Still, the UK-paradox gives an idea what is a possible way to deal with the challenge of income inequality, no matter the actual reason: a rapidly expanding global trade or fast innovations. Europe's experience shows that factor accumulation and changes in the level of technology may enable a country to avoid further deterioration of income distribution. A single growth-accounting based model serves as an explanation why. In the model, the central indicators of growth are labour productivity and capital intensity along with technological progress (TFP). By modifying TFP we can establish that the central indicators are labour productivity and capital intensity along with labour augmenting technological progress. Once the prime task of economic policy in a number of EU member states (and elsewhere as well) is to cope with stubborn and even rising unemployment rates, it is reasonable to look at the labour input over time. A crucial question related to growth and employment is therefore how vigorously a nation is capitalising its available labour potential to achieve high employment ratios and not to forsake national income. If, for instance, a nation is suffering high labour costs, enforcing arbitrary minimum wages, or believes in overregulation of labour markets, then companies in this country will try to rely heavily on capital input (and technological progress) instead on job creation. The unemployment rate will rise, causing losses of national income and slowing the economy.⁷ Many EU member states - Spain, France, Italy, and others - need to reduce significantly their unemployment rates after they skyrocketed in the wake of the global financial and economic crisis had them (in Spain almost 20 percent of labour force). Labour input and its growth rate allow for conclusions regarding labour income ratio. At the same time, technological progress is the key variable of growth in modern economies; yet it requires the quality of labour input to get along with technology thus being able to accommodate new production techniques and innovation.

After an influential article (Mankiw/Romer/Weil, 1992) stressed the necessity to disaggregate the Solow residual and to treat the human capital stock separately, a flood of literature followed. Ever more complicated models emerged introducing ever more parameters capturing patent stock, education, distance to the technological frontier, and so forth. For the sake of simplicity we apply the basic Mankiw/Romer/Weil model which works best if the input's income shares are the same, one third:

$$Y = AK^{\alpha}L^{\alpha}H^{\alpha}, \quad (1),$$

where $\alpha = 1/3$ and H is the amount of human capital in the economy expressed by the number of college degrees among all workers L .

Then the respective marginal products, MPL and MPH , and therefore the wage levels, are

$$MPL = 1/3A(KH/L^2)^{1/3} \quad (2), \text{ and}$$

$$MPH = 1/3A(KL/H^2)^{1/3} \quad (3).$$

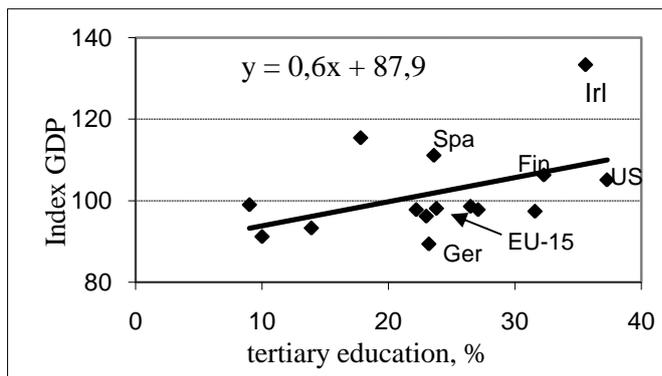
Obviously, the relative wage of the skilled workers (w_s) increases when the number of unskilled workers increases, and falls when the amount of skilled labour increases:

⁷ According to Okun's law, one extra point of unemployment costs 2 percent of output.

$$w_s/w = MPH/MPL = L/H \quad (4).^8$$

Equation (4) gives an idea why wage inequality in developing countries is higher compared to industrialised economies with their greater supply of skilled labour. But equation (1) explains why education matters: Skilled labour input would generate some output growth even if other factor inputs stagnate. This translates into higher standard of living (in terms of higher per capita income) given number of college graduates (Graph 4). Research results make clear that wage differentials among individuals are largely the result of different patterns of investment in human capital. Education decreases the risk of falling into low-wage employment.

Graph 4: Correlation between education and GDP index* in EU, pre-crisis period



* Index GDP: GDP country index 2005/GDP country index 1996. EU-25 in 1996 and in 2005 = 100; Tertiary education only: University attainment of the 25- to 64-year-old population (1991-2002). Source: Eurostat

The next conclusion is that the level of development matters. The underlying neo-classical growth model implies that the reduction of the technological gap between the leading nations and the lagging ones is exogenous. Obviously, globalization (and WTO) has reduced particular barriers to technology so a convergence in technology may gradually occur in the world. With saving and investment rates, technology and resource endowment becoming similar, economies in different part of the world may converge over time and reach same level of development. This in turn would facilitate a more balanced labour-capital income distribution in all countries. Therefore, if unequal income distribution is the case in an individual country, the conclusion might be that the reason is poor economic policies there.

Yet some researchers do not believe in closing the technological (and level of welfare) gap. They conclude there might be merely a “beta” convergence regarding the level of income in individual nations (Jungmittag, 2003). If this assumption holds, a significant real (sigma) convergence of standard of living of nations may hardly happen, not even within economic blocs like the EU. Then a permanent poor-rich member states gap would maintain a permanent capital-labour income distribution gap within the EU. But with labour force abundant, the high skilled workers may benefit as well. This is a possible explanation why the

⁸ Marginal products of labor and human capital are calculated as follows: $MPL = A1/3K^{1/3}L^{-2/3}H^{1/3} = A1/3K^{1/3}$

$H^{1/3} L^{-1/3} L^{-1/3} = A1/3(K/L)^{1/3}(H/L)^{1/3} = A1/3(KH/L^2)^{1/3}$. Similarly, $MPH = A1/3(KL/H^2)^{1/3}$. Consequently,

$MPH/MPL = w_s/w = (KL/H^2)^{1/3}/(KH/L^2)^{1/3} = (L^3/H^3)^{1/3} = \sqrt[3]{(L/H)^3} = L/H$.

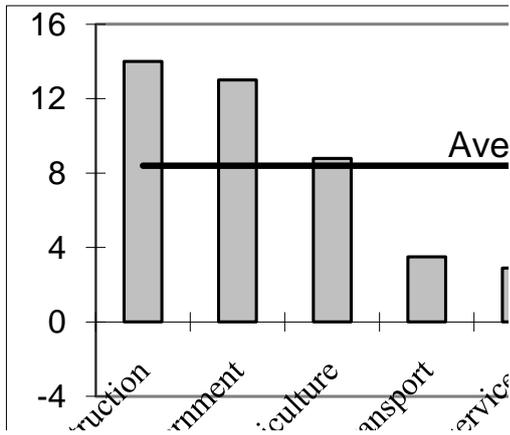
share of high skilled labour income in the EU was by the mid 2000s on average 42 percent of total labour income, up 6-7 percentage points that share 30 years back (Jaumotte and Tyrell, 2007).

Another effect of globalization which makes it harder for politicians to work in favour of social justice is the rising demand elasticity of wages in many Western countries. Competition pressure from abroad causes unions to accept wage cuts (real, sometimes nominal as well) to keep workers employed. In this case owners of capital are the beneficiaries meaning the capital-labour income structure shifting towards the former. But sometimes it is neither globalization nor technology that causes labour to worsen relative to capital. Often political decisions prevent nations from moving up the productivity ladder, which happens usually when new, more productive sectors replace old ones with a lower marginal productivity. The resulting higher income per worker combined with more employment would then raise the share of labour income of national income.⁹ If for some reasons, mostly in an attempt to protect uncompetitive industries, a structural change is postponed, the wage share would decline. The reason is that losses-producing industries with a negative productivity are not attractive to investors; yet less investment translates into a stagnating or declining capital stock making capital scarce. At the end of the day capital owners are better-off relative to labor owners, and so on. In contrast, structural changes towards more productive industries would expand the labor's share of total income.

Insofar as globalization and technological change are exogenous factors politics will hardly succeed in fending-off their influence. Policy makers may rather succeed in mitigating the negative effects. A ubiquitous example is the state as an employer. Often public employment is inflated because the state does not consider marginal productivity of labor as a criterion of labor compensation. Empirically, in the EU, the bigger the government, the smaller the labor-capital income inequality. A glance at the correlation between cost of labor and productivity in the EU15 is instructive: during the last business cycle 2002-2007 unit labor cost increased most in the booming construction industry, followed by the public sector. In the manufacturing sector, under price pressure from China and other Asian emerging markets, the unit labor cost either stagnated or they have even decreased. In the sector of non-sophisticated services with its fierce competition from Eastern Europe the increase was far from average too (Graph 5).

Graph 5: Nominal unit labor costs by sector in the EU (old member states) 2002-2007, percentage change

⁹ The wage sum is a product of marginal productivity of labor times the persons employed. It increases along productivity gains, even if employment stagnated.



Source: Eurostat

The result is even more pronounced given that the state is on average bigger employer than the construction or the agricultural sector, reporting - in the Nordic states - up to one third of total employment.

Labour market institutions may also intervene and shape the capital-labor distribution of national income. Or their wrong policies may precipitate the trend towards income divide within the labor force. The latter is becoming more and more an issue of concern in Europe. In continental EU, the share of low skilled has decreased since 1980. The reason is various policies that were aiming at elevating the income level of the low skilled. Minimum wage requirements, agreements on compensation increases above the average, and others, have prompted firms to shed jobs and take measures to increase productivity. Across the old member states of the EU the share of low skilled of all employees has declined, although the opposite was intended (Jaumotte and Tytell, 2007). At the same time two other phenomena surfaced in Europe: while the number of households receiving social transfers has grown, the number of big earners has also increased. The latter has strengthened the group of the well-off in the society which means the rich-poor gap has widened, Table 2.

Table 2: Population by work intensity*, percent (households with no children only)

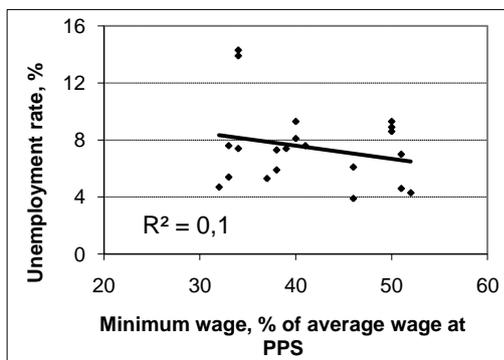
	Households with work intensity 0		Households with work intensity 1	
	1995	2006	1995	2006
Belgium	10	11	13	16
Denmark	:	9	:	23
Germany	9	13	19	18
Ireland	6	5	9	12
Greece	8	7	10	13
Spain	7	6	6	15

France	8	9	13	16
Italy	7	10	10	15
Netherlands	:	10	:	18
Austria	6	9	16	18
Portugal	4	6	10	13
Finland	:	9	:	20
Sweden	:	5	:	23
UK	7	8	21	27
EU old member states	8	9	14	18

*Work intensity 0: unemployed; Work intensity 1: High income. Source: Eurostat Online

Ironically, the heated European discussion on the merits of minimum wage policies seems to play, if ever, only a marginal role when it comes to a just income distribution. Across the EU member states with minimum wage arrangements and the US as well, there is no correlation between it and the unemployment rate (see Graph 6: R^2 is very small). Moreover, the EU Commission reckons the link between wage dispersion and unemployment is weak (EU COM, DG Employment and Social Affairs, 2005). Although a minimum wage law may produce some wage compression, this is obviously of no help to improve the income position of labor relative to capital.

Graph 6: Minimum wage shares and unemployment in 19 EU member states and the USA, mid 2000s

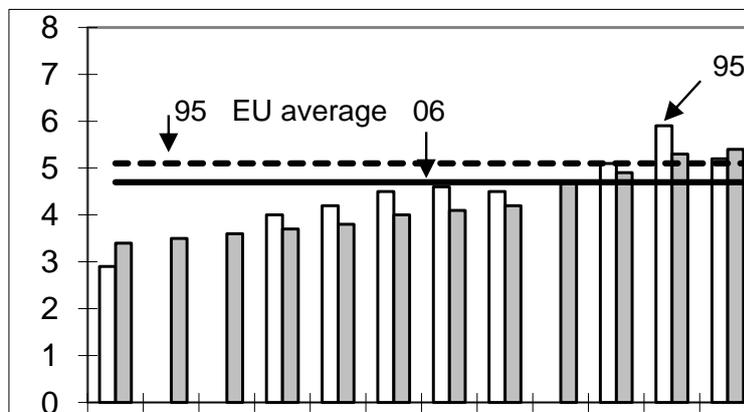


Source: Eurostat

Conclusions: Combine market and redistribution based solutions

The conclusion is income justice is not a question of primary distribution alone. Improving the financial and material situation of households presupposes a top-bottom redistribution policy by the state allowing the working poor to earn more and helping the unemployed to survive. The European model of social market economy has been doing that for decades. What is new is that globalization and technological changes are putting pressure to expand the scope of redistribution. A mismatch between spending needs and revenue limits of the state may well endanger the model as seen in the post-crisis period with a lot of EU member states overindebted (Hishow, 2010). Yet a broader role of the state in terms of securing a more even income distribution among different quintiles of households is welcome. In the EU, the correlation between public spending on social policies and greater social equality is made visible by various indicators (Atkinson and Marlier, 2010). Specifically, transfers by the state allow for closing the income gap. Between 1995 and 2006, i.e. before the crisis struck, the income gap between the top 20 and bottom 20 percent of income earners in the EU has narrowed in favor of the poorer, see Graph 7. This trend is seen in all old member states but UK and Denmark. The UK case has been already explained. In Denmark the above ratio has always been the smallest in Europe which indicated in that country the income equality is the greatest. Surprisingly, compared to liberal UK the poorer member states on the south periphery of the Union turn out to be more “unjust”.

Graph 7: Top 20 – bottom 20 percent income ratio in 1995 and 2006 at PPS



Source: Eurostat Online

A relatively new phenomenon in (Western) Europe is the pressing so called “new poverty”. That is another description of the heatedly discussed European trend towards “working poor”. As in the US, it has become an issue of concern given that more European households are facing poverty today than it has been the case a couple of decades before. More worrisome is also that even in times of low unemployment the compensation of given groups of employees stayed unsatisfactory; EU institutions are aware of it (Eurostat, 2010, Chapter 16). Such individuals are in danger to fall into the so called poverty trap, although if they belonged to households with more than one earner that probability will decline. On average, 13 percent of persons with part-time jobs and one fifth of all persons with no job may get trapped.¹⁰

¹⁰ Data on the US only. Source: M. Forster and d’Ercole, 2005.

The likely poverty trap is apparently a byproduct of the substitution of “good jobs” for bad ones caused by outsourcing and offshoring. Here again, the active involvement of the state may help, as statistics show. Before transfers the at-risk-of-poverty ratio in the EU and by member states tends to be high. It may decline significantly after transfers – by some 60 percent at the level of the Union and even by more than 80 percent in Finland, Table 3.

In the table is shown that between the mid 1990s and the pre-crisis period some countries performed below average – Italy, Portugal and Spain. Others have been more successful in the 1990s – the Netherlands, Ireland, France (and Spain), see Table 3, last column. But nevertheless the result is positive and that finding is consistent with research conclusions by the OECD stating the likelihood of poverty diminishes by some 50 percent across the OECD sample after the state stepped in with benefits and other support.

Table 3: At-risk-of-poverty* ratio before and after social transfers (without pensions), percent of households

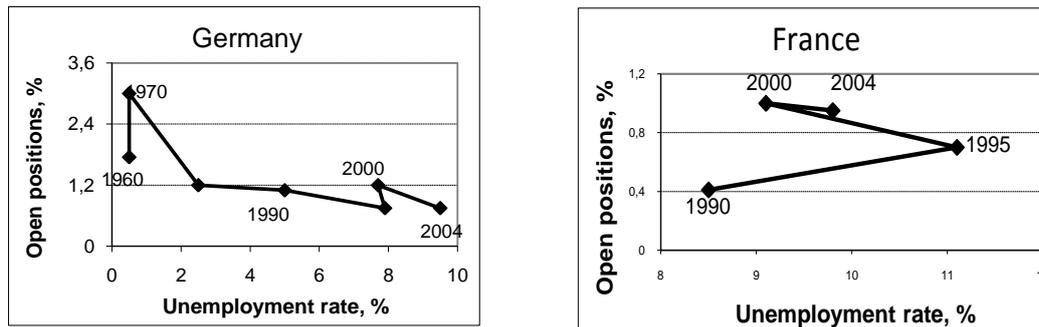
	Before social transfers		After social transfers		Improvement, %		Index 2006/1995
	1995	2006	1995	2006	1995	2006	
EU-15	26	26	11	10	58	62	1,07
Belgium	27	27	6	4	78	85	1,10
Germany	22	26	8	-	64	-	-
Ireland	34	33	6	10	82	70	0,85
Spain	27	24	13	13	52	46	0,88
France	26	25	9	10	65	60	0,92
Italy	23	24	17	16	26	33	1,28
Netherlands	24	21	6	8	75	62	0,83
Austria	24	25	8	6	67	76	1,14
Portugal	27	25	16	14	41	44	1,08
Finland	-	29	-	5	-	83	-
UK	32	30	9	8	72	73	1,02

*Poverty line: 60 percent of median equivalence household’s income. Source: Eurostat

At the same time state support may be the more efficient the broader the package of measures in place. For instance, households relying on transfers only still face a three times bigger poverty risk than in-work households. Then the best policy response to the inequality issue

would be a combination of both: encouragement to find a job and get employed in combination with some financial and other support by the government. However, it is a question of the right mix between state and market based solutions. Governments are called on to be careful not to oversupply households with social transfers. A comparison of the Beveridge curves of Germany and France gives an idea why. The normal Beveridge curve is negatively sloped indicating increase/decrease of open positions when unemployment is sinking/rising. While Germany's Beveridge curves have been in the long run normally sloped, France's displays anomaly in the early 1990s (Graph 8).

Graph 8: Long-run Beveridge curves of Germany and France



Source: EU Commission

In France, in spite of increasing unemployment rate, from 1990 till 1995 the number of open positions increased too – a diagnosis of a distorted labor market. Benefits and social transfers have probably discouraged idle people to actively search for jobs and employment. Therefore a better tuning of all instruments leading to a more just income distribution is important.

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