(defined as the ratio of employment growth over GDP growth). This is consistent with the finding that economic growth does not create jobs at the rate it used to, and that wage levels have often not kept pace with economic development.

The decline of labour shares should therefore be reason for concern for the ILO, given that it has the mandate to promote "full employment and the raising of standards of living" and "to ensure a just share of the fruits of progress to all" (Declaration of Philadelphia, Article II). Likewise, the ILO's founding principle of social justice makes it worthwhile to pay attention to the distributional consequences of shifts in factor shares: When falling labour shares are accompanied by a corre-

sponding rise in the capital share, it is the owners of capital who benefit from such a shift. Capital incomes are usually far more concentrated than incomes from labour, so that overall income inequality grows when incomes from capital grow at the expense of labour incomes – a link that has been well documented in a recent study by Emilie Daudey and Cecilia García-Peñalosa.

To make globalization fair, it is thus important to reverse the shift of factor shares and to increase the share of national incomes that accrues to labour. While there is still scope for further research, initial findings indicate that labour market policies such as employment protection legislation – can pay a significant part in achieving this goal.

Further Reading

Bentolia, S. and G. Saint-Paul, 2003. 'Explaining Movements in the Labor Share', Contributions to Macroeconomics Vol. 3, Issue 1, Article 9.

Daudey, E. and C. García-Penalosa, 2005. The Personal and the Factor Distributions of Income in a Cross-Section of Countries. Marseille: GREQAM, mimeo.

Diwan, I., 2001. Debt as Sweat: Labor, financial crises, and the globalization of capital. Washington D.C.: World Bank, mimeo.

Guscina, A., 2006. Effects of Globalization on Labor's Share in National Income. IMF Working paper 06/294. Washington, D.C.: International Monetary Fund.

Harrison, A.E., 2002. Has Globalization Eroded Labor's Share? Some Cross-Country Evidence. Berkeley, CA: University of California at Berkeley and NBER, mimeo.

Krueger, A.B., 1999. 'Measuring Labor's Share', The American Economic Review, Vol. 89, pp. 45-51.

Lee, K. and A. Jayadev, 2005. The Effects of Capital Account Liberalization on Growth and the Labor Share of Income: Reviewing and Extending the Cross-Country Evidence. In: G. Epstein (ed.) Capital Flight and Capital Controls in Developing Countries. Cheltenham, Edward Elgar, pp. 1-50.

Onaran, Ö., 2006. Labor's Share in Developing Countries in the Era of Globalization. Vienna University of Economics and Business Administration, mimeo.

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Labour Office

Malte Lübker

Technical Brief No. 01

In most regions of the world, the share of national income that goes to labour has been declining over the past two or three decades. This coincides with the advent of the latest wave of globalization, and several studies provide evidence that globalization has contributed to the decline in labour shares. Several aspects of globalization, and in particular financial openness and financial crises, have a detrimental impact on labour incomes. The downward trend indicates that either wages or employment creation in the formal sector have not kept pace with economic growth during globalization, or that a combination of both occurred. A falling labour share is thus the mirror-image of slow wage growth and low employment elasticities. It is consistent with the finding that economic growth does not create jobs at the rate it used to, and that income gains for workers have often not kept pace with growth. Moreover, a shift of incomes away from labour and towards capital has contributed to rising inequality. To make globalization fair, it is important to reverse the shift of factor shares and to increase the share of national incomes that accrues to labour.

What is the labour share?

The labour share shows how much of national income accrues to labour. It is normally calculated as the ratio of total compensation of employees (wages and salaries before taxes, as well as employers' social contributions) over a product or income aggregate, such as gross domestic product (GDP) or gross national income (GNI)1. However, this commonly used calculation of the labour share is bound to be a lower estimate since national accounts do not include incomes generated from self-employment under total compensation, but record them as "mixed income". Their attribution to either labour or capital is unclear due to the fact that they reflect both the returns on labour inputs and on capital investment. As one solution, some researchers have argued in favour of attributing two-thirds of

mixed incomes to labour and one third to capital, a standard commonly applied in industrialized countries.

However, as Ann E. Harrison from the University of California at Berkeley points out, data on incomes from self-employment are not always available for developing countries. The narrow measure of the labour share (i.e. excluding incomes from self-employment) still gives a reasonably good perspective on the size of labour incomes from the formal sector relative to total output. Labour shares typically vary between 40 and 60 per cent of GDP, and are generally higher in industrialized than in developing countries. They average just over 50 per cent of GDP in the OECD countries and Asia, around 40 per cent in Latin America, the Middle East and North Africa, and around 30 per cent in sub-Saharan Africa (see Diwan 2001).

How has the labour share developed under globalization?

The traditional view has been that labour shares remain constant for long periods, implying that

¹ Both GDP and GNI are measured at purchaser's prices, and therefore refer to value added plus any product taxes and minus any subsidies. Since capital income plus labour income equals value added (and not GDP or GNI), capital shares and labour shares that are calculated as a ratio of GDP or GNI need not add up to one.



workers participate fully in economic development. However, recent research has shown that labour shares are subject to sub-

stantial change over time. The study by Ann E. Harrison maps these changes for a sample of over 100 countries. She finds that prior to 1993, labour's share in national income fell on average by 1 percentage point per decade in poorer countries (i.e. those with per capita incomes below the median in 1985). However, it fell at a faster rate of 3 percentage points per decade afterwards.

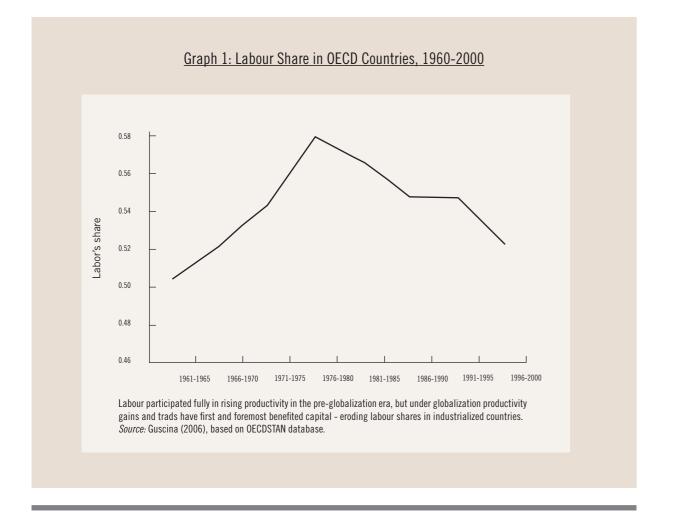
In richer countries, the labour share grew by 2 percentage points per decade prior to 1993, but then fell 4 percentage points per decade. These figures indicate a trend reversal for the richer countries post-1993, and an acceleration of an already downward trend for the poorer sub-group. Nonetheless, there is some divergence between countries: While Canada, Japan and Switzerland recorded a steady increase in labour shares since

the 1970s, most European countries saw a sharp decline over the same period.

Another study by World Bank economist Ishac Diwan substantiates the generally negative long-run trend in labour shares. He disaggregates trends by regions (rather than just by broad income groupings, as done by Anne Harrison), and by his account, labour shares have been falling since the late 1970s in most OECD countries; since the early 1980s in Latin America; and since the mid-1970s in Africa. In the Middle East, the labour share has by-and-large followed oil prices, and Asia is the exception to the rule with a flat trend prior to the crisis of 1997.

For a sample of 18 OECD countries, the IMF study by Anastasia Guscina confirms that labour shares reached their peak in the late 1970s and then fell by more than 5 percentage points. This marks a sharp trend reversal: According to her calculations, the labour share had been rising steadily throughout the 1960s and 1970s (see Graph 1).

Overall, there is thus compelling evidence that a downward trend in labour shares has begun with the advent of globalization in industrialized and developing countries alike.



Which factors can explain falling labour shares?

From a neo-classical perspective, each factor of production is compensated according to its marginal productivity. Shifts in the labour share are therefore explained either as a result of changes in factor productivity, or as a consequence of changes in the labour/capital ratio used in production (i.e. labour shares decline if production becomes more capital-intensive). However, as many economists have pointed out, this is an extremely simplistic explanation that ignores other important determinants. These include the bargaining power of labour versus capital, the impact of policies such as those towards trade and financial openness, and economic shocks like financial crises.

Samuel Bentolila and Gilles Saint-Paul find that differences in the capital-intensity of production can explain differences in labour shares, but also that bargaining power of labour might play a role. Similarly, Ann E. Harrison takes bargaining between capital and labour into account and models some of the potential channels that link it to labour shares. For example, financial openness should make it easier for capital to relocate production (or to make a credible threat to do so) and thus increase its bargaining power. Conversely, capital controls make the relocation of capital more difficult and Harrison accordingly finds that they are associated with higher labour shares. Further, exchange rate crises lead to declining labour shares, suggesting that labour pays disproportionately for large swings in exchange rates.

The weak bargaining position of labour under an open capital account is a causal mechanism explored by Kang-kook Lee and Arjun Jayadev. They find that financial openness exerts downward pressure on the labour share both in developed and developing countries for the period from 1973-1995. The effect is independent of the evidently negative impact of financial crises that often result from the sudden reversal of crossborder capital flows. That labour pays a high price for financial rises also emerges strongly from the study by Ishac Diwan. He reports an average drop in the labour share of 5.0 percentage points of GDP per crisis, and a modest catch-up thereafter. Given the fact that many countries have undergone more than one crisis, the cumulative drop in the wage share over the past 30 years is estimated at 4.1 per cent of GDP, and is especially large for Latin America. For a sample of ten large developing countries, Özlem Onaran confirms that labour shares fall during financial crises and that this decline persists even when GDP has regained its pre-crisis level.

All these studies therefore discover an empirical regularity: that financial openness in general, and financial crises in particular, put downward pressure on the share of national income that goes to labour.

According to Harrison, another facet of economic openness, trade, is also associated with lower labour shares, and so is foreign direct investment. This, too, is in line with the argument that greater external openness weakens the bargaining position of labour. However, there are some countervailing influences: Higher government spending is associated with an increase in labour shares, for both rich and poor countries.

These results point to a systematic negative relationship between various aspects of globalization and the labour share. Interestingly, a recent study published by the IMF comes to broadly similar conclusions. As the author Anastasia Guscina argues, globalization and the IT revolution have systematically benefited capital at the expense of labour in OECD countries. Whereas productivity gains translated into higher labour shares in the pre-globalization era, they are associated with falling labour shares after 1985. Like Harrison, she also finds trade openness to have a negative impact on labour shares. Both factors - productivity gains and increased trade - have been the main causes for the shift in national income from labour to capital. By contrast, employment protection policy tilts income towards labour, but this effect has become weaker with globaliza-

What are the implications for decent work and fair globalization?

When the labour share in national income falls, this indicates that either wages or employment creation in the formal sector have not kept pace with economic growth, or that a combination of both occurred. Put another way, if labour shares were constant (rather than declining), economic

growth would translate into higher wages, more employment, or both. A falling labour share is thus the mirrorimage of slow wage growth and low employment elasticities

