Are Wages in Ukraine too Low? And What Could Be Done to Increase Them?

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April 2007

Executive Summary

This paper compares wages to labor productivity levels in Ukraine. The main conclusion is that while recent wage increases have allowed wages to “catch up” with productivity developments, future wage increases in excess of the growth of labor productivity would hurt Ukrainian competitiveness.

A separate look at productivity levels and wages in industry reveals that productivity growth has been faster and wage growth more moderate than in the economy as a whole. The paper therefore suggests that a key issue for Ukraine’s competitiveness is the increase in the public sector wage bill without commensurate increases in the productivity and quality of public services.

The paper argues that the way to higher wages is through higher productivity growth. This includes a combination of greater investment and greater restructuring. The paper shows that in the industrial sector Ukraine has benefited in recent years from rapid productivity growth and accelerated restructuring. However, to sustain this pattern into the future, Ukraine will need to improve its investment climate and bring it closer to the levels observed elsewhere in the region. Only then will Ukrainian wages reach the levels of wages in Eastern Europe.

Outside industry, and in particular in the public sector, a key issue is that wages remain low, often below the subsistence level. However, wage increases without commensurate changes in productivity (through improved quality of service and through employment rationalization) would simply push up the public sector wage bill and crowd out urgent investments in the modernization of Ukraine’s public sector, including its public infrastructure, a potential constraint to future productivity growth.

The paper compares the Ukrainian subsistence minimum with an international recognized poverty line and shows that the subsistence minimum is relatively generous. While the need to offer attractive compensation to public sector workers to attract the right skills is understandable, the Government should also make it clear that there cannot be further wage increases without a simultaneous agreement on reforms to increase productivity.

Finally the paper considers whether there is a case for employee representatives to push for higher wage increases as a means to encourage capital deepening and thus force productivity improvements. The paper argues that this would largely go at the expense of reduced employment. In fact, experience from other European countries suggests that where labor market participants have agreed a policy of wage restraint (often with the help of government mediation) this has promoted investment, greater competitiveness and ultimately higher labor productivity and rising incomes. Where instead wages increased ahead of productivity, the result has been lower long-term growth, after an initial consumption led spurt, and higher unemployment.

Ukraine should follow the good international examples and promote a set of policies oriented towards rapid productivity growth based on a sound investment climate, wage restraint and employment growth. A particular challenge for Ukraine in this respect will be to promote greater productivity in the public sector, so that it can offer competitive wages without further increases in the public sector wage bill.
Introduction

Ukraine has been experiencing very high growth in nominal and real wages since 2004. This has been a key factor behind the rapid growth in real household incomes, and the commensurate reduction in the number of people living in absolute poverty from over 30% in 2001 to around 8% by 2005 (against a US$2.15 per day expenditure based poverty line). Yet, in the political debate the question is asked whether Ukraine has done enough to share the fruits of economic growth evenly among the population. A key point in this debate is the question what policies are needed to ensure that workers at the lower end of the wage distribution earn a living wage – a salary sufficient to lift the household out of poverty. Hence the question in the title of this note.

We focus on a discussion of wages, labor productivity and the labor market, bearing in mind that targeted social assistance programs can be effective tools for poverty alleviation and redistribution, which presently to a large extent they are not (see World Bank Public Finance Review, 2006; and PULSE Study II, 2006). While we sympathize with the aspirations of Ukrainians to share in the fruits of economic growth our analysis suggests that the very rapid increase in real wages since 2004 has brought wage costs in Ukraine to levels that are roughly commensurate with Ukraine’s aggregate productivity level. In other words, further wage increases over and above the rate of productivity growth would likely hurt competitiveness and may dampen labor demand.

The note makes two further observations. First, if the general conclusion above is correct the way to higher wages is through higher productivity growth. This includes a combination of greater investment and greater restructuring. The good news is that Ukraine has benefited in recent years from rapid productivity growth and accelerated restructuring, particularly in industry. Moreover, the underlying pattern of productivity growth at the firm level is not dissimilar to that experienced in Eastern Europe around 7-10 years earlier, suggesting that Ukraine may have begun to converge to the levels of productivity in the more advanced transition economies. However, to sustain this pattern into the future, Ukraine will need to improve its investment climate and bring it closer to the levels observed elsewhere in the region. Only then will Ukrainian wages reach the levels of wages in Eastern Europe.

Second, the relationship between wages and productivity in Ukraine is not uniform across the private and public sectors. While the private sector, including the bulk of industry but also financial and other market services, has recorded fast productivity growth that justifies rapid wage growth, the same is not true in the public sector. Yet, public sector wages have grown as fast as private sector ones, driven by increases in the minimum wage against which most public sector wages are indexed. Given that the minimum wage in 2006 still covered only about 70% of the national subsistence minimum, the drive to increase minimum wages is understandable. In several professional areas (teachers, doctors, senior administrative personnel) the public sector may not be able to pay enough to attract high skills, with negative impact on the quality of public services. Yet, as public sector employment is still fairly large and has been reduced by far less than employment in privatized firms, these wage increases go at the expense of a constantly rising share of the public wage bill in the overall budget and crowd out much needed public investments that would support higher productivity in the economy overall.

The consequence of this second observation is that while in the private sector, higher productivity growth will be increasingly driven by investment, in the public sector it may need to come from a combination of institutional reforms and the rationalization of employment. Without such complementary measures, further increases in the minimum wage will create fiscal pressures and ultimately come at the expense of vital public spending on maintenance and equipment as well as new capital investment. While in theory it would be possible to finance these expenditures through higher taxes or greater public borrowing, both are macroeconomically not advisable. What this also implies is that Ukraine needs to continue to create more jobs in the private sector to absorb labor as public sector employment shrinks.
The conclusions of this note come with an important caveat. Wage data in Ukraine are difficult to interpret because of the prevalence of large un-reported informal earnings. Based on a comparison of earnings and consumption patterns in the public and private sectors, Gorodnichenko and Peter (2006) conclude that in the public sector, wages under-report real earnings by about 30%. By the same token, several observers argue that the recent rapid increase in real wages and incomes represents at least to some extent the formalization of earnings. Because of this caveat the cross-country comparisons presented below are important: they suggest based on reported wage data that there is not much room for further wage increases over and above the rate of productivity growth in the economy.

The note proceeds as follows. First we examine aggregate wage levels from the point of view of macroeconomic balance and competitiveness and show that by the end of 2006, Ukraine was relatively close to balance in terms of relative wage and productivity levels. We also argue that while in industry Ukraine may have experienced rising competitiveness since the mid-1990s, in the public sector the opposite may be true. Second, we examine the sources of productivity growth to see how wages might be increased in the future, focusing on the investment climate, industrial restructuring and the supply of skills. Third, we ask the question whether – as some observers have argued – productivity itself might be increased through higher wages. The answer is yes – but only at the expense of lower demand for labor and as a consequence higher unemployment.

1. Are wages too low? Wage competitiveness, productivity and macroeconomic balance

The first step in our analysis of wages and competitiveness is to look at the development of wages in Ukraine against the development of GDP per worker over time. This does not correct for the quality or even quantity of labor input. During the early parts of the transition, many firms preferred to keep workers on half shifts or keep them on the payroll without actually paying them or using them in the production process. As a result, real labor input has probably increased since the mid-1990s, and at the same time, real take-home pay actually paid also increased faster than the real wage.

Figure 1. Aggregate GDP per worker against real wage in the economy

![Graph showing Aggregate GDP per worker against real wage in the economy](image)

Source: International Financial Statistics and State Statistics Committee

Figure 1 shows that labor productivity, measured as GDP per worker, started increasing before average real wages from around 1998 onward (while GDP growth was positive only after 2000, employment fell by more
than GDP from 1998 already). Until 2003, real wages had not yet caught up with aggregate productivity, but since 2004 the index of real wages has exceeded that of labor productivity and has grown at a much faster rate. As noted above this may to some extent reflect the formalization of wage payments, so the actual impact of profit margins in the private sector would be less than suggested by Figure 1. Yet the trend would be the same.

It may be argued that the pattern shown in the figure is influenced by the choice of the starting year. In fact this is not the case. The World Bank’s Job Study for Ukraine shows that aggregate labor productivity declined between 1990 and 1996 by around 50% while the real wage declined around 45%.¹ Ukraine’s early transition was characterized by a pattern of slowly declining employment, leading to sharp falls in labor productivity corresponding to equally sharp falls in real wages. This pattern is now being reversed, but there is no evidence from the aggregate data that there is much room for wages to increase ahead of productivity.

The second step in the analysis is to compare Ukrainian wages with wages in other transition economies. At first glance, such a comparison suggests that Ukrainian wages are indeed low. For instance, the average wage in Ukraine in 2006 was US$ 206 per month, whereas in Romania it was US$ 410, in Russia US$ 394 and in Poland US$ 798. But we must compare wages across countries to productivity levels as well. This exercise is complicated by the question at what exchange rates the comparison should take place. It is well known that poorer countries tend to have lower price levels for non-tradable goods and as a result comparisons based on market exchange rates can lead to an underestimation of relative productivity levels in poorer countries. The solution is to use so-called purchasing power parity (PPP) exchange rates.

One approach that has been used in the literature is to compare wages in US dollars to GDP per worker measured in PPP (and a range of other factors).² Why are wages not measured in PPP in this comparison? Because the focus here is on the competitiveness of wage levels in the tradable goods sector. This will benefit both from having low US dollar wages and high overall productivity levels in the economy. By this metric, in 2004, Ukraine’s US dollar wages were only 40-50% of the level predicted by its GDP per capita in PPP.³ The very large gap is explained substantially by the fact that Ukraine’s market exchange rate (which is used to convert wages into US dollars) is still only a fraction of its PPP rate. This is generally true across transition economies, so Ukraine can not take much comfort from this comparison if it considers its main regional competitors.

Figure 2, taken from the latest IMF Staff Report on Ukraine, underlines this point. This figure shows the relationship between the US dollar wage and the level of GDP per capita in PPP across different transition economies. The reference point here is the EU25. Compared to this benchmark, Ukrainian wages are very low – less than 10% of the EU25 average in 2005. But there is clear evidence of a convergence path that transition economies follow over time, consistent with an increase of around 1.75% in the US dollar wage for every 1% increase in GDP per capita in PPP terms. Figure 2 also shows that between 2000 and 2004, Ukraine largely moved along this convergence path, although it moved slightly away from it (and towards losses in wage competitiveness) in 2005. As a reference point, this would imply that Ukraine can absorb US dollar wage increases in the range of 10-12% for a GDP growth rate in the 6-7% range. Note that this includes the combined effects of real wage growth measured in UAH and real exchange rate appreciation of the UAH against the US dollar. Actual growth in US dollar wages since 2004 was closer to 35% per annum.⁴ The

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¹ Job’s Study, p. 6, Figure 2.
⁴ Implicit in the “transition path” is a trend appreciation of the real exchange rate against the US dollar across all transition economies. This trend appreciation includes the traditional Balassa-Samuelson effect of changes in the relative prices of tradables and non-tradables, but also idiosyncratic factors such as the growing formalization of earnings. The shape of the path depends on the reliability of estimates of PPP, which are subject to potential revisions. Results are therefore indicative only.
“transition path” also includes the effects of greater formalization of wage payments, which is a phenomenon not restricted to just Ukraine. The cross-country comparisons thus provide a benchmark that is relatively robust to the problem of under-reported earnings and changes in the level of reporting.

Figure 2. US dollar wages convergence path in transition economies

Source: IMF Article IV Staff Report, Staff Issues Paper 2, Ukrainian data updated to 2005.

The third step in this aggregate comparison of wages and productivity levels from the point of view of competitiveness is to look at other indicators of competitiveness. In particular, we look at Ukraine’s overall macroeconomic balance. This matters because the fast growth in real wages combined with some real exchange rate appreciation has been a key factor behind the rapid growth in imports of consumer durables, including motor vehicles, electronic equipment etc.. If such rapid growth in imports leads to current account imbalances that cannot be sustainably financed, macroeconomic policy must react to bring the level of domestic demand back into balance with domestic supply. This typically involves a downward adjustment in wage levels measured in foreign currency, or at the very least a sharp deceleration in the pace of wage growth.

We again rely on the latest IMF Staff Report for this step in the analysis. The IMF looks at this question by trying to estimate the level of the current account deficit that may be considered sustainable for Ukraine. This level is not necessarily zero, because Ukraine has a higher rate of return on investment than many industrialized countries and therefore should be a net importer of capital. Indeed, Ukraine’s access to international financing has greatly improved in recent years, and hence it can afford to finance a moderate current account deficit quite easily. According to the IMF, the sustainable “current account norm” in Ukraine, taking into account a range of factors such as access to financing (FDI), the level of income, domestic policy variables such as fiscal policy, demographic variables, energy dependence, the level of foreign exchange reserves, and other measures of country risk (such as EU membership and the quality of governance) is around 2-6% of GDP in 2006. The IMF further estimates the relationship between the real exchange rate (which directly impacts the level of US dollar wages) and the actual current account deficit and finds that on this measure, Ukraine’s current real exchange rate is fairly close to a level consistent with external balance.

One way to think about a country’s real exchange rate is as the relative ratio of wage and productivity levels between two countries. When in one country, real wages increase faster than productivity and in another country they do not, the first country experiences an appreciation of its real exchange rate against the other country. In other words, if Ukraine were to continue the recent pattern of wage increases above the level of
aggregate productivity growth, it would experience real exchange rate appreciation and this in turn could lead to external imbalances because of the loss of external competitiveness. Note that if the bulk of higher earnings is spent on imports, the effect of real exchange rate appreciation on the external balance is large. If instead consumers have a high propensity to spend additional earnings on domestically produced goods, real exchange rate appreciation may manifest itself in the form of higher domestic prices and as a result higher inflation. In reality, Ukraine would likely experience a combination of both.5

2. Wage competitiveness disaggregated: the problem is in the public sector

The above analysis has been done at the aggregate level. At the broad level of aggregation, the answer to the question whether wages are too low is clearly “no”. But maybe, a more disaggregated look reveals a different picture? We initially examine industrial productivity because the data are most complete. We then offer some more tentative observations on public sector wages and productivity.

Industrial productivity performance in Ukraine has been much stronger than in the economy as a whole, largely because of much greater labor shedding. A recent study by the OECD compares aggregate productivity and wage developments in industry in Russia and Ukraine.6 The study calculates unit labor costs measured in a synthetic Euro-Dollar currency (to even out the effects of cross-rate fluctuations in the Euro-Dollar rate) for the sake of cross-country comparisons. Overall in Ukrainian industry, labor productivity increased by 80% from 1997-2004, while wages (both measured in Euro-Dollars) increased only by 45%, and unit labor costs fell by around 20% over the period.7 Across different branches of industry results are strikingly different. In the fuel and electric power industry, productivity has been stagnant and so have wage levels. In light industry (excluding food) productivity growth was fast, but so was wage growth. The largest gaps between productivity growth and wages are observed in the food industry, wood and paper processing, non-ferrous metallurgy and chemicals and petro-chemicals. Ferrous metals take an intermediate position with slightly below average productivity and wage growth. Interestingly, therefore it seems that the largest decline in unit labor costs in Euros seems to have occurred precisely in those branches of industry involved in international trade and predominantly privately owned.

Figure 3 reports developments in value added per employee and real wages in constant UAH for both the economy as a whole and for industry since 2000. The data are from the State Statistical Committee and are in constant domestic prices rather than Euro so that the data is not directly comparable with the OECD data. But combined with the OECD results, clear conclusions can nonetheless be drawn:

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5 A concern about the possible link between nominal wage growth and inflation is that it can create a vicious circle, whereby higher wages lead to adjustments in inflationary expectations throughout the economy and thus push up wage settlements in the next period. Latin America in the 1980s experienced several episodes of public sector driven wage-price spirals.


7 The OECD study presents data using both gross output and value added in industry to measure unit labor costs. Gross output growth was faster than growth of value added, but the results are qualitatively the same.
First, labor productivity in industry has been growing at a rate much faster than in the economy as a whole. The main reason is much faster labor shedding in industry.

Second, the real wage in industry has grown less rapidly than in the economy as a whole, largely because average wages in industry were above the economy-wide average and were less affected by the large increases in minimum wages in 2004-2006.

Third, unit labor costs in industry have followed a U-shaped pattern, declining initially and growing since around 2000, whereas for the economy as a whole unit labor costs are now above 1997 levels. Competitiveness in industry has therefore suffered less than competitiveness in the economy as a whole from the rapid growth of real wages in recent years.

Non-industry consists of agriculture and services, whereby services may be further subdivided into market services, such as finance, real estate, transportation, and non-market services, including all of public services (health, education, public transport, water and sanitation etc.). Some market services are internationally traded, but most non-market services are not. As a result cross-country comparisons are difficult. Nonetheless, a few largely speculative observations can be made.

First, the public sector wage bill in Ukraine has been growing steadily from around 7% of GDP in 2003 to an estimated 8.2% in 2007 (taking the government’s latest budget changes into account). While this is not out of line with levels in other transition economies (Reid and Orac, 2007), the pace of its recent increase stands out. Moreover, reclassification of wages of professors in higher education institutions as R&D spending would push this ratio up by an estimated further 1.5% of GDP. Add to this the fact that recorded wage spending only covers spending on base salary and excludes remuneration in kind (which may amount to another 10-15% of the wage bill or another 1% of GDP) and Ukraine’s total public sector wage bill does look out of line with the rest of the region and with other Middle Income Countries. As argued in the World Bank’s Public Finance Review Vol.1 (2006), high spending on consumption and transfers in the Ukrainian budget crowds out necessary spending on maintenance and new capital investment and thereby lowers the competitiveness of Ukraine’s public sector, with negative implications for potential future growth.
Second, it is not clear that higher public sector wages have been combined with an increase in the quality or quantity of public services, however measured. For instance, in the education sector, unit costs of providing education at various levels has risen by an average of 108% in the 2002-2005 period, largely on account of a sharp decline in average student-teacher ratios from 11.2 to 9.4 – almost half of the OECD average (16.9). Without improvements in teacher training, educational materials and curriculum reform, lower student teacher ratios hardly contribute to higher quality education. However, rigid staffing norms have prevented service providers from rationalizing employment, while expenditures on staffing have crowded out other spending categories. The situation in the health sector is similar.

Third, Ukraine boasts still one of the largest employment shares in public enterprises, at around 12.5% in 2004 (down from over 20% in the mid-1990s), against 4% in the EU8 and below 2% in the OECD countries (Reid and Orac, 2007). Productivity improvements in these enterprises have, as a rule been slower than in the private sector. On a consolidated basis, the problem of public sector competitiveness extends beyond the provision of basic public services.

And yet many in the public sector earn little more than the minimum wage. Table 1 compares the minimum wage to the subsistence minimum and the average wage in Ukraine over the period 2001-2006. This shows that the minimum wage still falls short of the official subsistence minimum. Politicians are concerned that many public sector workers would find it difficult to make a decent living based on the salary they earn. This may prevent the public sector from attracting workers with the appropriate set of skills, and in turn make it more difficult to deliver improvements in the quality of public services.

| Table 1. Minimum Wage and Subsistence Minimum (as of January, 1 of corresponding year unless labeled otherwise) |
|--------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Subsistence minimum for working age population, UAH | 331.05          | 365.00          | 365.00          | 386.73          | 453.00          | 483/496/505*    |
| Min wage, UAH                                      | 118             | 140             | 185             | 237             | 300.33          | 350             |
| Min wage, % change                                 | 29.7            | 18.6            | 32.1            | 28.1            | 26.7            | 16.5            |
| MW/SM ratio                                        | 36%             | 38%             | 51%             | 61%             | 66%             | 72%/71%/69%     |
| Memo:                                             |                 |                 |                 |                 |                 |                 |
| International Poverty Line (US$2.15 per day) at current exchange rate, in HUA | 341.85          | 341.85          | 341.85          | 341.85          | 329.76          | 325.73          |
| International Poverty Line (US$2.15 per day) at PPP rate, in HUA** | 87.21           | 87.21           | 87.21           | 87.21           | 84.12           | 83.09           |
| Average wage, UAH                                  | 253.39          | 320.76          | 400.59          | 499.66          | 640.86          | 864.91          |

*In 2006 the subsistence minimum was gradually raised as of January 1/April 1/October 1
** Using a constant conversion factor of 3.92 between the PPP and the market exchange rate based on 2005 data.

Yet, these concerns need to be put in perspective. Against an internationally comparable poverty line of US$ 2.15 per day in PPP exchange rates, Ukraine has experienced a dramatic reduction in poverty levels; indeed at 8%, poverty in Ukraine today is lower than in any other CIS country and comparable to levels in the EU8. Even if we convert the internationally comparable poverty line of US$ 2.15 per day into HUA at the current market exchange rate (which lower than the PPP rate and hence results in a higher HUA equivalent), we obtain a monthly expenditure level of HUA 326. This is below the minimum wage of HUA 350 in 2006. Therefore, according to an internationally comparable poverty line, the current minimum wage would provide for an
income sufficient to prevent absolute poverty. We return to the issue of how to attract skilled workers to the public sector in the concluding section.

3. Why are wages low: restructuring, investment and skills

If wage growth is linked to productivity growth, what drives productivity growth and why is productivity in Ukraine comparatively low? We examine three sources of productivity growth in a transition context.

The first determinant of productivity in transition is restructuring. In simplistic terms, economic transition can be represented as the process of reallocating resources from large state-owned companies producing goods and services designed for central planners’ preferences to small and medium private companies producing goods and services for consumers. If we further assume that productivity measured at market prices (i.e. reflecting consumer rather than planners’ preferences) is higher in private companies than in the former state-owned ones, it follows that the process of restructuring itself is a major driver of productivity improvements.

This simple logic has been empirically tested on a growing number of transition economies and compared to benchmark data from market economies. The general conclusion is that rapidly reforming transition economies such as the Baltic States or Hungary experienced an unusually high contribution to productivity growth from reallocation of labor across firms and from the exit of old firms and the entry of new ones. In OECD countries this accounts usually for between 15-20% of total productivity growth, but in the Baltics it was as high as 40-45%. Recent and preliminary work carried out for a forthcoming World Bank Regional Study explaining productivity growth across the ECA region has expanded the sample of countries studied to include Ukraine. What these results, which are still undergoing testing and revisions, appear to suggest is that Ukraine has been experiencing an accelerating pace of restructuring over the 1998-2005 period, with entry and exit and reallocation of labor across firms accounting for over half of total productivity growth during the period. Ukraine would therefore appear to follow in the footsteps of eastern Europe and the Baltics with a delay of 7-10 years. Moreover, comparative analysis across the region also suggests that progress in privatization, and greater competition from imports and domestic entry are key factors behind enterprise restructuring and productivity growth in Ukraine, as they have been in other countries in the region.

Restructuring as a source of productivity growth is naturally a temporary phenomenon. Over time, productivity improvements within firms are expected to become the main drivers of productivity growth in transition economies. This has already been happening in the leading reformers in eastern Europe. The key to productivity growth within firms is investment in new plant and equipment (or modernization of existing assets) and innovation of both products and processes of production. A significant literature has sprung up in transition economies attempting to explain the pattern of investment and innovation. The following basic conclusions emerge:

- At the firms level, private ownership (in particular foreign ownership) and the degree of competition are key determinants of innovation and investment. For Ukraine this implies that further privatization and the strengthening of the business climate for small and medium enterprises to promote competition and business entry should be key priorities.
- Ukraine has significant room for improvement on both counts. Public ownership of productive assets remains relatively high. Figure 4 shows the EBRD estimates of the size of the private sector in all transition economies as well as the rating on large scale privatization. Ukraine on both measures clearly lags the countries of Eastern Europe and is barely above the CIS average.
- Table 2 compares Ukraine to a range of middle income countries, both in the region and outside, using a variety of metrics of the general investment climate. Ukraine ranks in the lower half in international comparisons such as Doing Business or the World Economic Forum Competitiveness Index. It also has a

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relatively low score across different dimensions of the World Bank’s Governance Indicators. Interestingly against a benchmark of transition and developing countries only (the Bertelsmann Transformation Index), Ukraine scores relatively well – ranked 32 out of 119.

Figure 4. Overall Transition Progress, Progress in Large Scale Privatization and Private Sector Share - Ukraine, CIS average, and EU 10 Average, 2006

This note presents only a cursory overview of investment climate issues in Ukraine. More detail is provided elsewhere (e.g. Private Sector Development Note, World Bank, 2006). What is clear is that Ukraine cannot hope to sustain the improvements in labor productivity over time without improving its investment climate and without further strengthening the role of the private sector and of competition in its economy. Another simple way to see this is by comparing Ukraine’s aggregate investment ratio to GDP at 23.5 percent in 2006 with the investment rate in the high growth economies of Asia, where these have typically been well over 30 percent. While in some new EU member states, investment rates have been lower, to converge to EU income levels, Ukraine will require higher growth rates than those presently recorded in the new EU member states. However, because the process of restructuring has started relatively recently, in the short-run, Ukraine may be able to continue to grow at some 6-7 percent annually. This and not more should be its benchmark for determining whether additional wage growth is justified.
Table 2. Ukraine’s Business Climate in comparative perspective

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<td>Dealing with licenses</td>
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<td>Enforcing contracts</td>
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<td>Closing a business</td>
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<td>Comparators’ ranks</td>
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*Bertelsmann Index evaluates the progress in implementing reforms towards democracy and market based economy in transition countries

**World Bank Governance Indicators- Average value for six governance indicators: Voice and Accountability, Political Stability, Government Effectiveness, Regulatory Quality, Rule of Law and Control of Corruption. Each indicator is measured in units ranging from about -2.5 to 2.5, with higher values corresponding to better governance outcomes.

The third factor determining productivity growth, and a factor of increasing importance all around the world, is the availability of skills. This has not so far been Ukraine’s problem. The World Bank’s Job Study (2005) showed clearly that returns to skills in Ukraine are still relatively low and that there is excess demand for basic manual skills in Ukraine. But this may be changing. As Ukraine’s productivity increases and its industrial
sector modernizes the skills premium is likely to increase as it has in other transition economies, including Russia. Ukraine produces a large number of university graduates, but many of them either do not find appropriate employment in the Ukrainian labor market or leave to look for work in Europe and Russia. Ukraine therefore faces the challenge in future to better match the production of new skills to the demand for skills from the labor market. This issue is addressed in parallel policy notes.

A particular issue would seem to be the ability of the public sector to attract skilled employees. Indeed, the Ministry of Labor and Social Protection reports that at the lower end of the public wage scale, vacancies are left unfilled, because the offered remuneration is simply too low to attract quality workers. This in time would negatively affect the quality of public services. Could it be, then, that the path towards higher productivity in the public sector would lead through higher wages, because only then would the public sector be able to attract sufficiently qualified personnel? This question is examined in the concluding section.

4. Could wage pressure lead to accelerated restructuring?

Some Ukrainian commentators have argued that if wages were to increase firms would be forced to adopt more capital intensive technologies, thus lifting Ukraine to a different technology level. This argument was also proposed by German trade unions in the 1970s and became known as the “productivity whip” argument. This note does not share this view. We make two empirical arguments in the case against, and then conclude the note by examining the question of wage setting from a labor market perspective looking at the roles of the public and private sectors respectively.

First, assume the argument was true that higher wages led to higher productivity. In this case, unit labor costs should not increase when wages rise, because productivity would react. In other words, there would be an automatic stabilizer that would match every wage increase with a corresponding productivity increase, thereby leaving competitiveness unaffected. The analysis in Section 1 of this note shows, however, that this is not the case. When wages started to grow fast, the rate of productivity growth did not increase (in fact slowed down marginally). The productivity whip argument finds no empirical basis in Ukraine’s experience to date.

Second, the experience of other European countries may be instructive. We examine the cases of Portugal and Ireland. Both joined the EU at levels of income well below average and both countries experienced a period of relatively rapid convergence of incomes. However, since the late 1990s, Portugal has stagnated and stopped converging whereas Ireland has continued to grow. The relationship of wages and productivity had something to do with that (Figure 5, Figure 6). In Portugal, convergence in the 1980s and early 1990s was driven by consumption and a related boom in the non-tradables sector. Rapid wage growth combined with capital inflows into retail lending were key ingredients in fuelling the consumption boom. However, by the late 1990s, productivity in the tradable goods sector no longer kept up with rising wage costs and the rising costs of non-tradable inputs. As a result, Portugal lost international competitiveness and has stagnated since. In Ireland, convergence was based on strong improvements in competitiveness in the tradable goods sector, spurred by Foreign Direct Investment, and strong education sector providing ample supply of skilled labor and importantly a policy of wage restraint agreed in a trilateral agreement between unions, employers and the state.
To conclude, we make a more general point about the functioning of labor markets. In simple economic models, the wage is set to equal the marginal product of labor. In other words, employers will hire additional workers as long as the marginal additional output these workers produce is just equal to the wage. And workers will work for this wage as long as there is no alternative way of using their time and effort that yields the same utility. This alternative may be another job, including potentially in another country or in the informal sector, or it may be unemployment, if workers find work sufficiently hard to prefer not working. Assume in such a model the wage is to be increased above the marginal product of labor. This is not possible, unless the workers who are currently employed manage to somehow protect themselves against the competition of other workers who...
are working in other companies or who have so far decided not to work, but would consider returning to work if the wage was raised. In other words, such a strategy requires some degree of worker power, or alternatively legal protection against the easy hiring and firing of workers. By the same token, however, such a strategy also requires those currently not working to face barriers against returning to work even if they wanted.

In reality, workers often have sufficient power to force wage increases above the marginal product, either because of strong trade unions or because labor laws protect them from competition. In fact, both conditions are present in Ukraine, as the Jobs Study showed. Firms with a higher degree of union membership tend to pay higher wages, and the existing Labor Code does protect workers against firing and as a result makes hiring costly (although in practice the Labor Code is often not respected). Employers faced with worker power will in fact adjust: they will tend to adopt more capital intensive technologies and over time will reduce the relative demand for labor. But assume this happens across the economy. The result would be a development path whereby labor productivity would rise fast and so would wages, but employment growth would stagnate. This is precisely the experience of western European countries such as Germany and the result is high and persistent unemployment. This is not a good path for Ukraine, because Ukraine has already one of the lowest employment rates in Europe (Figure 7). Ukraine does not use the labor resources it has available to their full extent. The result is a lower level of national income and a large share of the population dependent on public transfers.9

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9 There is one additional argument in favor of the productivity whip. This is the idea that companies do not in fact maximize profits in Ukraine, but instead maximize private cash flow benefits, with these benefits invested abroad rather than reinvested in the firm. Because workers are more likely to save additional incomes domestically, transferring profits to workers through higher wages could raise the national savings rate. This argument while appealing aims to use labor market policies to rectify the problems in Ukraine’s investment climate. This is a short-sighted strategy. We have argued that without improvements in the investment climate, Ukraine’s productivity growth will not be sustained in any case, and so soon enough there would be nothing to redistribute.
What is the role of the state in determining labor market outcomes? The Irish example shows, how the state can act as a representative of the interests of the nation as a whole in labor negotiations. Employers and employees will have a tendency to agree to a “productivity whip” strategy, since employers will want to avoid strike action and workers – the employed insiders - are better off as a result. But the costs are born by the unemployed and those discouraged from seeking employment. Their interests should be represented by the state in arguing for wage restraint and ensuring wage negotiations leave sufficient room for employment growth.

Finally, we turn again to wage determination in the public sector. As argued further above, Ukraine’s public sector may not be able to attract sufficient skills with current wage scales. In the public sector, wages are not set by the labor market, however, but are determined administratively as part of the budget process. There is no possibility for a public entity to offer a wage premium to a worker offering a skill that is badly needed but generally in short supply. The marginal productivity of some workers in the public sector might be higher than the wage scale offered for such a position, but the public sector is unable to change the wage scale to reflect this. The public sector, as a result, often resorts to offering fringe benefits such as cheap housing, access to subsidized credits, social privileges and – sometimes – access to income from informal payments. Even if these benefits manage to attract skilled workers, the result is a lack of transparency.

Does is follow that even if the “productivity whip” does not work in the private sector, it might work in the public sector? Those arguing for wage increases to reduce incentives for corruption and to attract better skilled employees would argue that this is the case. However, Section 2 has demonstrated that at an aggregate level, it is precisely the public sector that suffers from wage growth in excess of productivity growth. Thus, while the
argument may be true at the level of individual positions, it is not true for the public sector as a whole. The upshot is that the public sector needs to create fiscal space to change its remuneration policy and put itself in a position to attract higher quality workers. Raising the wage scale as a whole will fail to achieve this. What is required instead is a combination of downsizing of public sector employment and greater wage differentiation at the higher skill end (see also Reid and Orca, 2007). This would require a combination of sector reforms, including in health, education and other line ministries, and civil service reform to revise pay scales and revisit human resource policies for the public sector as a whole. This is a challenging agenda and will not be implemented quickly. It is all the more important that in the meantime public sector pay grows at rates somewhat below the rate of growth of aggregate budget revenues, so that space is created for the necessary investments, both physical and organizational to make the public sector more efficient and more competitive. From this perspective, wages in Ukraine are not too low, but the public sector wage bill may already be too high.

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