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# ECFIN COUNTRY FOCUS

## Highlights in this issue:

- Immigration is paramount for explaining labour market outcomes in Cyprus.
- EMU participation and the need to safeguard competitiveness call for the automatic wage indexation system to be revisited.

## Cyprus: immigration, wage indexation and the adjustment in EMU

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### Summary

*Assessed vis-à-vis the usual macroeconomic and Lisbon benchmarks the Cypriot labour market performs better than the EU average. However, labour supply shortages, particularly in low-skill occupations, and the automatic inflation indexation of the wage-setting mechanism constitute important challenges that need to be addressed. Given the tight labour supply conditions, maintaining the supply of labour, through immigration flows and enhancing the domestic labour supply, would be paramount for ensuring wage moderation. Moreover, Cyprus' euro area participation and the need to safeguard competitiveness, as potential losses in competitiveness in the new environment have a severe impact on the real economy, call for the wage indexation system to be revisited. Although there is no conclusive evidence that the cost-of-living-allowance (COLA) has contributed to a self-feeding inflationary spiral, this might have been due to past low inflationary conditions which have prevailed in Cyprus. However, wage indexation could exacerbate inflationary pressures. This may result in inappropriate real interest rates and wrong private expectations, thus hampering macroeconomic stability. Furthermore, allowing wages to reflect sector or company productivity gains would not only safeguard Cyprus competitiveness but also be conducive to a more efficient allocation of labour.*

### Introduction

Cyprus joined the euro area on 1 January 2008. With the adoption of the single currency and the abolition of national monetary policy, the performance and flexibility of its labour market as an adjustment channel to asymmetric shocks has become paramount for the successful participation of Cyprus in the economic and monetary union (EMU). Assessed vis-à-vis the usual macroeconomic and Lisbon benchmarks the Cypriot labour market performs well and better than the EU average. Unemployment is particularly low partly due to sustained GDP growth and an efficient unemployment insurance system, characterised by relatively low benefit levels of short duration. Employment and job creation are high. A noteworthy tripartite consensus decision-making is in place which has delivered harmonious labour relations, while an income-friendly tax system, with low direct taxation and a high exempted income, benefiting more than 60% of tax-payers, has not overburdened labour costs, thus supporting labour demand. However, labour supply shortages, particularly in low-skill occupations, and the automatic inflation indexation of the wage-setting mechanism constitute important challenges that need to be addressed.<sup>1</sup>

*Assessed vis-à-vis the Lisbon benchmarks, the Cypriot labour market performs better than the EU average*

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In order to address labour shortages, working permits have been issued to foreigners in recent years leading to large-scale migratory flows of mostly low-skilled workers, thus bringing the share of foreign workers to about 20% of the labour force. Consequently, immigration is paramount to explain labour market outcomes in Cyprus.

Given the importance of market flexibility in EMU, this Country Focus assesses the functioning of the labour market in Cyprus. Section 2 presents some stylized facts. Section 3 describes the role and impact of foreign workers and section 4 assesses the wage-setting mechanism. Finally, section 5 discusses some policy suggestions.



## Stylized facts

Cyprus is a small, open, services oriented, island economy immersed in a successful process of nominal and real convergence with the EU. Over the last ten years, economic activity has been growing at an annual average rate of about 4% in real terms, which compares with 2¼% in the euro area.

*The labour market has been characterised by conditions of almost full employment.*

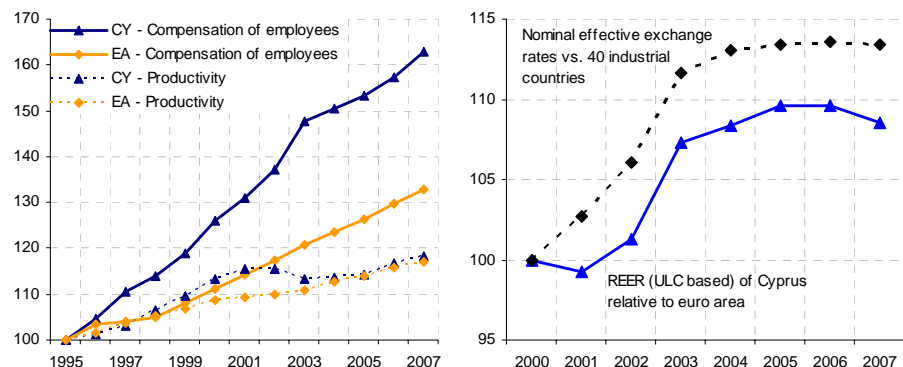
The labour market has been characterised by conditions of almost full employment and has outperformed the EU average on all fronts. Over the same period, the unemployment rate averaged at 4¼%, while the employment rate averaged at 69¼%. While population has been growing at an average annual rate of 1½%, employment has been growing in tandem by 2½%, accelerating to 3¼% during 2003-2007, and has been benefiting from large inflows of foreign workers. In 2007, unemployment fell to 3.9%, of which 71% remained unemployed for less than 6 months. Therefore, long-term unemployment remained very low, less than 1% of the labour force, in parallel, the employment rate rose above 70%, with 78½% for males, 62½% for females, and 55% for older workers, thus fulfilling the relevant Lisbon targets.<sup>2</sup>

Sectoral analyses of the labour market reflect a steady transformation of the Cypriot economy characterised by the increasing importance of the services sector. During this period, employment in the services sector increased by 4 p.p. thus reaching about 75% of total employment in 2007. In parallel, employment in agriculture, in industry and in construction declined from 11½%, 13¾% and 6½%, to 8½%, 10½% and 9¾%, respectively. For comparison, in the euro area in 2006<sup>3</sup>, industry and construction accounted for 17¼% and 7¾% respectively of total employment while the services sector accounted for 71¼%.

*However, while productivity grows at the same pace as in the euro area, wages grow at a significantly higher rate.*

While productivity in Cyprus grew at the same pace or even slightly faster than in the euro area over the last decade (Figure 1), wages grew at a significantly higher rate. As a result, unit labour costs (ULC) grew more rapidly than in the euro area, implying a steady loss of Cyprus' competitiveness vis-à-vis its partners. However, developments in ULC, as well as goods trade may not provide an accurate indication of the competitive position of the Cypriot economy as a whole. While the manufacturing sector represents less than 10% of the economy, exports of goods mainly consist of re-exports. Moreover, the services sector seems to be doing well in international markets. Specifically, judging from their export performance, the sectors of banking and other financial services, international business services, and shipping appear to have successfully exploited Cyprus' comparative advantages in terms of geographic location, infrastructures, and human capital.

**Figure 1: Wages, Productivity, and REER; Cyprus vs. Euro Area (1995=100)**



Source: AMECO, Commission services



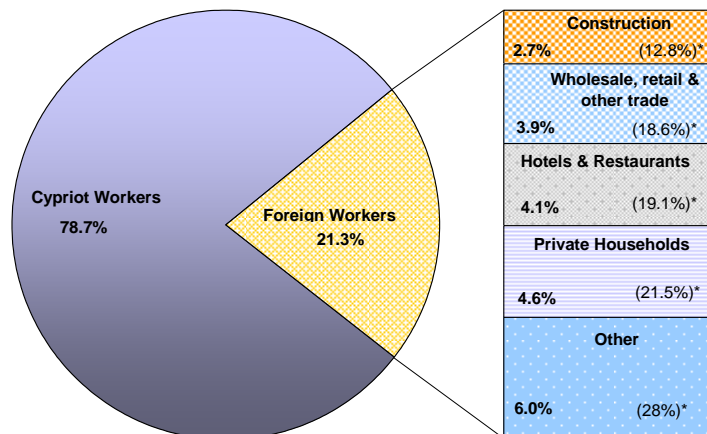
## The impact of immigration

*Foreign workers account for about 20% of the labour force, amongst the highest rates in the euro area...*

During the last decade population grew by about 1½% annually. This was mainly due to an increase of the working age population as a result of large migratory inflows. Working permits, particularly from 2003 onwards, were issued to foreigners with a view to addressing labour shortages, leading to large-scale migratory inflows. As a result, the share of foreign workers reached about 16% of the total labour force in 2007. Data from the social insurance services show that the number of foreign workers rose from around 25.000 in 2000 to about 80.000 in 2007, of which only 38% were EU citizens. According to Christofides et al (2007), if illegal foreign workers were included, the total number of foreign workers would exceed 100.000, about 20% of the labour force, amongst the highest in the euro area. Most of the foreign workers are relatively young (20 to 30 years old), low-skilled, thus with lower productivity than the domestic labour force. The largest share of the total, 21½% is employed as household workers while another 19% is employed in the tourism sector. The construction and the trade sectors employ 12¾% and 18½%, respectively (Figure 2).

Another source of labour supply in the last few years has been Turkish-Cypriot (T/C) workers. The partial lifting of restrictions on movement between the government-controlled area and the areas not under the effective control of the government of Cyprus, led to a large increase in the inflows of T/C workers since 2004, attaining 2,800 in April 2008. More than 60% of the latter are employed in the construction sector, with an additional 10% in the manufacturing and 7% in the distribution sectors.

**Figure 2: Distribution of foreign workers in Cyprus by economic activity, 2007**



N.B.:\* as a percentage of total foreign workers.

Source: Ministry of Labour, Social Insurance Services and AMECO, Commission services

*...half of the recorded GDP growth might be attributed to foreign workers.*

The impact of migration on an economy is well documented, particularly in terms of growth and wages. For the US, Barro and Sala-i-Martin (1992) estimated that an increase of 1 p.p. in the net immigration rate was associated with a 0.1 p.p. increase in the growth rate of GDP. Furthermore, looking at the US experience between 1980 and 2000, Borjas (2003) found that in the US, there was a negative relation between wage growth and immigrant penetration into particular skill groups, although this varied dramatically across education groups. Moreover, Pissarides (2008) argues that not only is there no evidence that unemployment is higher in countries with higher immigration but, on the positive side, migrants create additional demand, while inducing wage moderation.

*...who also contribute to wage moderation.*

Christofides et al (2007) estimated that 54% of GDP growth recorded in Cyprus between 1995 and 2005 can be attributed to the increase in foreign workers, who accounted for about 70% of the increase in persons employed. They found that a 1 p.p. increase in domestic labour leads to an increase of the gross value added (GVA) by 0.144% while a 1 p.p. increase in foreign employment leads to an increase of 0.136%.

Regarding the impact of foreign labour on wages, Pashardes et al (2001) find that the increase of foreign workers' participation in the labour market has contributed to restraining wage increases, particularly in the tourist sector, while the magnitude of the impact varies according to education and skills. Christofides et al (2007) examined how an increase in the number of foreign workers in a sector affects average real weekly wages of Cypriot workers. The authors found that the proportion of foreign workers has a statistically significant but quantitatively small negative effect on the individual's average real weekly wage. However, when the level of education and skill is considered, the impact is stronger with an overall positive effect for the higher educated and a negative effect for the others. The positive role played by foreign labour in curtailing wage pressures, especially for the low-skilled segment of the labour market is largely explained by the fact that a majority of immigrant workers is employed in low-skill labour-intensive activities.



## ***Institutional and wage setting***

*A main feature of wage-setting is the cost-of-living-allowance (COLA), an automatic wage-indexation mechanism.*

The labour market institutional setting in Cyprus is based on consensus decision making between the social partners and the government. According to Messios (2004), since the establishment of the Republic of Cyprus back in 1960, social partners have approached industrial relations and conflict resolution mechanisms on a voluntary basis. The balance of power between the two sides, coupled with the social responsibility hitherto demonstrated, has delivered labour peace. The legislation governing the relations between employers and employees is minimal. Conflict resolution is based on the Industrial Relations Code, a gentleman's agreement signed by the social partners in 1977, which lays down detailed procedures.

*...whose uniform application does not allow wages to reflect productivity differences across sectors.*

The common process through which the terms and conditions of employment, including wage-setting, are determined is collective bargaining between employers associations and unions, with the facilitation of the government. The Cypriot labour market is characteristically highly unionized. Unionisation rates in some sectors (such as the public and the banking sector) reach virtually 100%. However, according to official estimates, in the private sector (excluding banking) the rate is much lower, around 30% to 35%. The strong tradition of consultation between the social partners and the government facilitates the tripartite process of collective bargaining. This leads to the adoption of sectoral collective agreements, which are quite broad regarding the range of issues they cover (such as wages, overtime pay, working hours, holidays etc) and usually have a duration of 2 to 3 years. Wage increases agreed in this process are mainly based on productivity growth. However, those covered by collective agreements are additionally compensated with the cost-of-living-allowance (COLA). According to estimates of the Central Bank of Cyprus (CBC), the share of total employees receiving a COLA is about 60-65%.

*In EMU, full indexation may exacerbate the level and persistence of inflation and aggravate inflation differentials.*

The COLA is linked directly to the percentage change in the consumer price index (CPI) excluding excise tax increases. It is granted automatically and it is part of the terms of employment, as a percentage increase of the basic salary.<sup>4</sup> The frequency of adjustment is every six months (1st January and 1st of July) and the calculation is based on the average percentage change in the CPI of the last six months over the preceding six-month period. The average annual increase of COLA from July 1997 to July 2008 was about 2¾%. Furthermore, a preannounced minimum amount of COLA is granted to low income employees. As a result, the percentage increase at the lower end of the wage scale is higher than inflation.

The existence of this automatic wage indexation mechanism is a divisive issue. According to Messios (2004), it enjoys strong support by the labour unions and has remained a non-negotiable issue during the collective bargaining process. The COLA serves as a means of 'social justice'. It has also been argued that in the absence of the COLA wage increases would have been larger. However, it can also be argued that the COLA undermines flexibility and competitiveness, while its uniform application does not allow wages to reflect productivity differences across sectors.

Full indexation may exacerbate the level and persistence of inflation from a price shock of imported goods or from a hike in indirect taxes, especially in EMU. The impact of indexation on inflation persistence depends on the monetary policy stance. According to, for instance, Fischer (1983) and Gordon (1984), a "price-wage" spiral process would only take place if monetary policy is accommodative. This would

*Overheating can lower the real interest rate and boost asset markets, which in turn could turn into a boom-bust process.*

definitely not be the case of Cyprus in EMU. However, this does not mean that indexation could not have an impact on inflation. In a monetary union wage indexation in a country can actually induce wider and more persistent inflation differentials. As shown in European Commission (2006), an inflationary shock in one country would lower the real interest rate. This, in turn, could trigger a credit impulse, which would feed domestic demand and thus overheating and inflation. Credit impulses of this sort boost household spending, including on housing, and may lead to market-asset booms. Eventually, the competitive position of the country would worsen, thus widening the external imbalance, as wages will tend to follow inflation in order to preserve wage levels in real terms (IMF, 2005). The equilibrium will only be restored once the competitiveness channel acts to reduce exports and activity. However, there is a risk that the initial asset boom is ended with a protracted period of low growth (boom/bust process; Martinez – Mongay, 2008).

*Those benefiting most from the COLA are those with higher income, while the majority of the lowest-paid are not covered.*

The limited empirical studies available are not conclusive as regards the impact to date of the COLA on inflation, which over the last decade has been relatively low averaging at 2½% (based on the HICP; 2¾% using the CPI). For some commentators the COLA could be linked with upward trends in wages, to the extent that it induces inflationary pressures (Kontolemis, 1994; Karamanou et al, 2001). However, Christofides et al (2006) found that a price-shock has a positive but transitory effect on wages (four quarters). Papageorghiou (2008), examining the period 1980–2006, found no supporting evidence of an inflationary spiral (second round effects) between wages and prices. Pashardes (2008) also found that there is no evidence that COLA is self-feeding through a positive impact on inflation.

Acknowledging the low historical inflation, Pashardes (2008) argues that the shortcomings of the COLA are firstly, that wages are connected to product prices rather than to productivity gains and secondly, that those benefiting most from this system are those with higher income (70% of them have indexed wages through the COLA), while the majority of the lowest-paid (e.g. unskilled workers) are not even covered (only 6% are indexed through COLA). However, even if the COLA did not have had pervasive effects in the pre-euro-area period, the system might not be compatible with euro adoption. Pissarides (2008) argued that joining a large union like the eurozone brings changes to relative prices of non-traded goods. He argues that these inevitable adjustments should not be followed by automatic wage rises, since this is not inflation caused by monetary factors but rather an adjustment in relative prices led by economic integration. To preserve the competitiveness of Cyprus in the euro area, wages should be allowed to adjust as a function of productivity gains and mobility potential, rather than through automatic indexation.

*Allowing wages to reflect sector or company productivity gains would contribute to a more efficient allocation of labour.*

The COLA has also a significant impact on public finances. Beyond wages and salaries, COLA is also an integral feature of pensions, benefits, and other allowances. According to Ministry of Finance estimates, in 2007, the COLA amounted to about €2 billion, almost 13% of GDP, in cumulative terms. Therefore, a 1 p.p. increase in the COLA corresponds to €30 millions in higher expenditure, about ¼% of GDP. The COLA can induce expenditure overruns, especially in the presence of price shocks. For example, during the preparation of the 2008 budget the projection for the CPI was around 2½%. Based on the current trends, CPI is most likely to average at about 5% for the year. As a result of this divergence, public finances will bear the cost of an additional unforeseeable expenditure of around €75 millions, about ½% of GDP.

## **Looking forward**

Cyprus' euro area participation and the need to safeguard competitiveness, since potential losses in competitiveness in the new environment may have severe consequences on the real economy, call for the wage indexation system to be revisited. Although there is no conclusive evidence that the COLA has contributed to a self-feeding inflationary spiral, this might have been due to the hitherto low inflationary conditions which have prevailed in Cyprus (due to price stability achieved by an efficient monetary policy and the past exchange rate framework of the Cyprus Pound). Allowing wages to reflect sector or company productivity gains would be conducive to a more efficient allocation of labour. Moreover, at times of strong inflationary pressures the COLA can impede the stabilising role of fiscal policy. This is even more significant within the context of monetary union and the

loss of the monetary policy tool. Current efforts to put in place a medium-term budgetary framework provide an opportunity to revisit and address the issue, by eradicating the aforementioned rigidities induced by the COLA. If such a reform were to have an adverse impact on low-income workers, targeted countervailing social measures for those in real need could be implemented.

Given the tight labour supply conditions, improvement in the participation rates of female and older-age workers could improve labour supply. Martinez-Mongay (2008) argues that a sustained supply of labour would appear to be paramount for ensuring wage moderation in Cyprus. This indeed could, partially at least, be achieved by maintaining current immigration flows. However, the domestic labour supply should also be enhanced. According to European Commission (2007), the challenge of maintaining fast-growing labour-market inflows could be addressed by reducing the currently high gender pay gap, further promoting part-time work, enhancing vocational training and increasing employment and training opportunities for young people by reforming the education, training and apprenticeship systems. Given the low skill levels of immigrant workers, particular efforts should be made to integrate them, while raising their employability.



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- <sup>1</sup> These challenges are not new. Already in the mid-90's, Kontolemis (1994) argued that chronic labour shortages, coupled with the indexation mechanism and the strong and extensive unionization, resulted in large increases in real wages and in deterioration of the competitiveness of domestic firms.
- <sup>2</sup> For a more detailed review of the Cypriot economy during the last decade see Martinez-Mongay (2008).
- <sup>3</sup> Due to data availability is only up to 2006; 1996-1998 ECU; Former Euro area 12.
- <sup>4</sup> If, for example, the COLA is 80% of the basic salary and the CPI increased by 5%, COLA is going to increase so that gross salary (basic + accumulated COLA) increases by 5%. Specifically, if a person earns €1,000 of basic salary monthly the total salary would be €1800. For this person to be compensated for 5% inflation, the salary has to increase by €90 to €1890. To achieve that, COLA has to increase from 80% of the basic salary (€800) to 89% of the basic salary (€890).

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