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Highlights in this issue:

- **The two contrasting wage formation systems can both produce good results overall, but they bring opposing challenges**
- **Estonia needs to cope with procyclical wage growth**
- **Finland would benefit from greater sector- and enterprise-level wage flexibility**

Managed vs free wage-setting in Finland and Estonia: optimising outcomes

*By Mart Maiväli and Natalie Lubenets**

Summary

Wage-setting systems are a key element of the labour market institutional setup. In Europe, they vary considerably, reflecting the diversity of existing economic and social models. Over the long run, different wage-setting models can have a significant impact on macroeconomic performance, industrial structure, and social cohesion. The Finnish and Estonian wage-setting systems are an example of a stark contrast between close neighbours. In Finland, wage-setting is highly centralised and in Estonia it is almost fully decentralised. While each of these systems appears to have supported a good overall performance in terms of employment and economic activity in these countries, each has given rise to serious challenges in some other areas. Estonia needs to cope with the pro-cyclical volatility of its wage growth, which risks feeding through to higher inflation, and with social equity issues. Conversely, Finnish wage-setting prevents its companies from reacting flexibly to changing markets. Both Estonia and Finland may need to consider how these current drawbacks could be addressed without compromising the credibility and overall positive performance of their wage-setting systems.

Introduction

Estonia and Finland are small and very open economies operating within a fixed exchange rate system. However, the two countries represent unlike economic models which reflect differences in the level of economic development, industrial structures and the economic institutions. In particular, in terms of the EU wage-setting institutional spectrum, Finland and Estonia are at the opposite extremes (see Table 1).

Although Estonia's and Finland's business structures are increasingly intertwined, the way their wages are set are diametrically opposed

Economic literature identifies three stylised levels of wage bargaining. In the case of national, i.e. completely centralised, bargaining the wage differentials reflect the negotiating power and preferences of the central labour market organisations. In the case of sectoral or industry-level bargaining, the degree of centralisation is lower and the wage differentials are greater. Finally, at an enterprise (completely decentralised) level of bargaining, wages are set within the firms and wage differentials are therefore potentially much wider. The three bargaining levels can also be considered in the context of the wage flexibility and adjustment capacity of the labour market. An alternative characteristic of wage bargaining system is a degree of coordination, which reflects consensus between the bargaining partners in centralised or decentralised systems (Buti et al., 1998).

As in the majority of Central and Eastern European countries, trade union membership in Estonia is well below the EU average. This coincides with low

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Wage-setting takes place primarily at the enterprise level in Estonia

bargaining coverage and a low degree of coordination, in particular in small and medium-sized firms in the private sector. Wage negotiations mainly take place at the enterprise level. Economic transition in Estonia has led to a changing economic structure and often very different plant and company productivity levels within a given sector. This explains why employers are reluctant to delegate bargaining power to their sectoral organisations, which operate mostly as lobbies (Kerem and Lubenets, 2006). Consequently, "sectoral" wage agreements are common in Estonia only in sectors dominated by a single producer or an oligopoly (e.g. energy supply). Although bargaining coordination across firms and sectors is weak, Estonia has a tripartite negotiating body at the national level. The Confederation of Trade Unions issues recommendations on wage developments, but these are not binding for the concrete bargaining that takes place at lower levels.

Table 1: Comparative features of labour markets

	FIN	EE	EU 27
GDP per capita in PPS (2006)	116.3	67.9	100
Real GDP average growth (1997-2006)	3.8	7.9	2.4
Productivity, PPS in 2006 (EU-27 = 100)	112	64	100
Employment rate (2006)	69.3	68.1	64.4
Unemployment rate (2006)	7.7	5.9	8.7
Degree of wage bargaining coordination	High	Low	Varies
Percentage of workers covered by collective bargaining	82%	22%	66%
Trade union density (2000-2004)	71%	14%	25%
Gini coefficient	0.25	0.36	0.29
Minimum wage percentage of average*	~50	~33	~40

Source: Eurostat; DG ECFIN questionnaires, ECFIN (2007), OECD
**Note: For Finland, the wage floors of the collective agreements are used. EU27 average based on countries with statutory minimum wages.*

Finnish wage-setting is by nature highly centralised and co-ordinated

In contrast to the unmanaged "*laissez-faire*" wages in Estonia, the Finnish wage-setting system is in effect highly centralised with intensive inter-industry coordination. Its tripartite wage-setting system has a long history of extensive cooperation between the social partners and the government (Asplund, 2007). The government is actively involved in guiding the wage outcomes, in recent years effectively through income tax cuts to support moderation in wage outcomes. The agreements cover the overwhelming majority of employees in the private and public sectors. The agreements set a general pay increase (often a lump-sum increase combined with a percentage increase) and allow for both an increase to be settled at sector level and a "wage drift", which traditionally accounts for approximately one third of the total wage increase. As a result, the Finnish wage outcomes are highly egalitarian, with the focus on supporting aggregate competitiveness and employment. Periodically, a national-level settlement is not reached and bargaining is decentralised to solely sector level. This has happened 7 times over the last 35 years, as well as in 2007. While in the past this has not reduced the centralised and coordinated nature of bargaining in the long run, it appears that the present break in central negotiations might have a more substantial effect on the future of Finnish wage-setting practices.

Impact on macro stability and EMU adjustment

Both systems appear well founded from a theoretical perspective…

The ability of different bargaining systems to achieve favourable macroeconomic outcomes has traditionally been analysed following Calmfors (1993). He suggests that completely decentralised or strongly centralised wage determination produce similar outcomes in terms of wages and unemployment. At a decentralised level, strong competition hinders bargainers from externalising a wage increase, which leads to optimum policy outcomes in terms of inflation and unemployment. With a certain degree of centralisation there is strong wage-unemployment trade-off. High level of centralisation improves coordination between the trade unions and induces the unions to internalise negative macroeconomic externalities of the wage policy, thus leading to lower wages than under other types of wage bargaining. Layard et al. (1991) stressed the importance of interplay between the union's strength and the degree of wage bargaining coordination on both employers' and workers' sides in producing favourable employment outcomes. Coordination and centralisation are two different routs to achieving the same aims. The economies with either highly

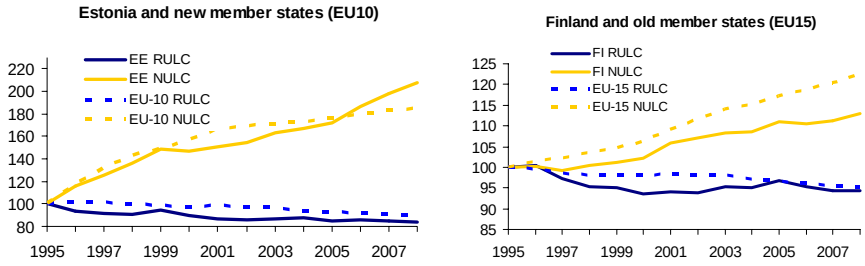
…and work well in their labour market context, but...

centralised and coordinated (Finland) or highly decentralised uncoordinated bargaining (Estonia) should outperform their intermediate counterparts. So, then, are both Estonian and Finnish wage bargaining systems equally successful?

Both the Estonian and Finnish economies stand out in terms of rapid productivity growth, high economic activity and good labour market performance relative to EU average (see Table 1 above). Although their labour markets are still suffering partly from the effects of the structural economic recessions they went through at the beginning of the 1990s (Maiväli, 2006), it appears that, overall, the labour market in both countries has performed well within their respective wage-setting system. However, this overall good macroeconomic performance may hide problems that could hinder economic performance if not recognised and addressed in good time.

Estonia and Finland operate in a fixed exchange rate regime, which underscores the importance of stability-oriented macroeconomic policies and structural policies to support external competitiveness (European Commission, 2006). In terms of inflation and overall macroeconomic stability, Finland's centralised wage setting seems to induce more predictability and stability than the free wage formation in Estonia. Nominal unit labour costs (NULC) have grown below the reference group average in Finland (although partly thanks to productivity growth in the electronics sector pushing down the national average NULC) but above average in Estonia in recent years, with some periods of deceleration followed by acceleration (see Chart 1). The lower growth of real unit labour costs (RULC) indicates the extent to which companies have been able to pass on wage rises to prices.

Chart 1: Nominal and real unit labour costs

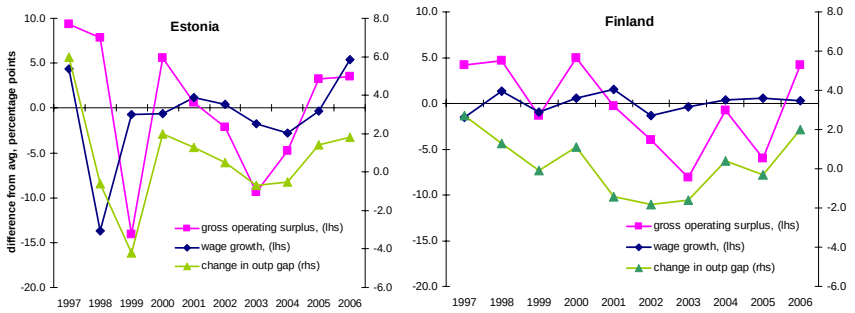


Source: Ameco

In the run-up to the EMU framework, the Finnish tripartite wage-setters turned their focus to increasing wage discipline (Asplund, 2007). The social partners acknowledged the need to pursue a strategy of aggregate wage and price moderation with the aim of preserving external competitiveness. While the overall wage negotiation framework remained intact, thereafter, the norm for the wage settlement was changed from expected inflation plus productivity growth to inflation target plus expected productivity.

Chart 2: Change in output gap, profits and wages co-movement

…Estonia suffers from pro-cyclical volatility of wage growth



Source: Ameco data, Estonian wage data from Estonian Statistical Office wage survey.

It appears that in Estonia the wage adjustments to restore labour market equilibrium are more frequent, and cyclical wage fluctuations deeper. Prior to 2004, nominal unit labour cost growth was below the EU10 reference group average, reflecting high structural unemployment and a closed labour market. In the aftermath of the Russian crisis in 1999, wage growth slowed down and even turned negative, helping to restore competitiveness. However, since 2005, buoyant economic growth at annual rates above 10% and exacerbating shortages of labour put strong upward

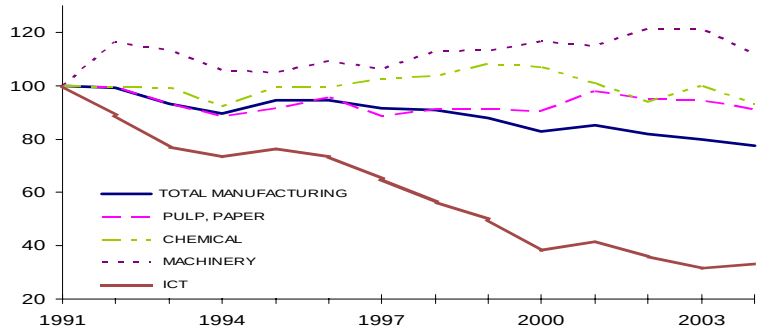
pressure on wages. By 2006, the unemployment rate dropped by almost 4 pp. compared with 2004, while both activity and employment rates increased substantially. In a system where wage formation is not regulated, market adjustment to labour shortages would imply sharp wage increases. Wages per employee grew on average by over 13% annually from 2004 to 2006. Such pro-cyclicality of wages puts pressure on prices, leading to possible creation of wage-inflation spirals. Overall, it seems that Estonian wages respond more directly than Finnish wages to cyclical and labour market conditions (see Chart 2). This leaves Estonian policymakers less leverage for managing economic policy objectives.

In Finland, lack of wage differentiation could endanger the competitiveness of heterogeneous sectors and enterprise in the long run

Another facet of the debate on the degree of centralisation of bargaining is its relationship with the dispersion of the wage distribution. In the context of EMU it becomes important that wage bargaining structures deliver fairly differentiated wage outcomes across sectors, regions and qualifications so as to facilitate external adjustment. Decentralised bargaining would in principle lead to higher dispersion in the wage distribution, and available empirical evidence indicates that the more centralised wage-setting systems tend to generate more compressed wage distributions (OECD 1997, Haskel et al., 1997, Blau and Kahn, 2002).

While the Finnish wage-setting system appears to be good for the overall macroeconomic performance, its wage policy is often criticised for its lack of sectoral differentiation. In the EMU context this means that industry might be vulnerable to asymmetric sectoral shocks. Before EMU, Finland often resorted to devaluations, motivated partly to restore the competitiveness of its forestry industry. In the framework of EMU, sectoral competitiveness hinges on the compatibility of central wage outcomes with sectoral developments. The limited differentiation in wage outcomes could potentially endanger sectors with lower productivity growth than the national average, while "subsidising" high productivity sectors. The unit labour cost trends indicate that over the last 15 years the Finnish ICT manufacturing sector has enjoyed rapidly declining unit labour costs while other major industry sectors have operated with broadly stable unit labour costs above the national average (see Chart 3). In contrast, sectoral wage differentiation is considerably higher in Estonia than in Finland (measured by deviation from the average, EU KLEMS data). Thus, the role of wages in EMU adjustment in Estonia is opposite to their role in Finland, with sectoral wage flexibility and adjustment capacity in place but lacking the overall macroeconomic stability.

Chart 3: Finnish nominal unit labour costs developments across industries



Source: calculations based on EU KLEMS data

The role of wage-setting in shaping the structure of the economy

Incentives arising from wage-setting may shape the structure of the economy

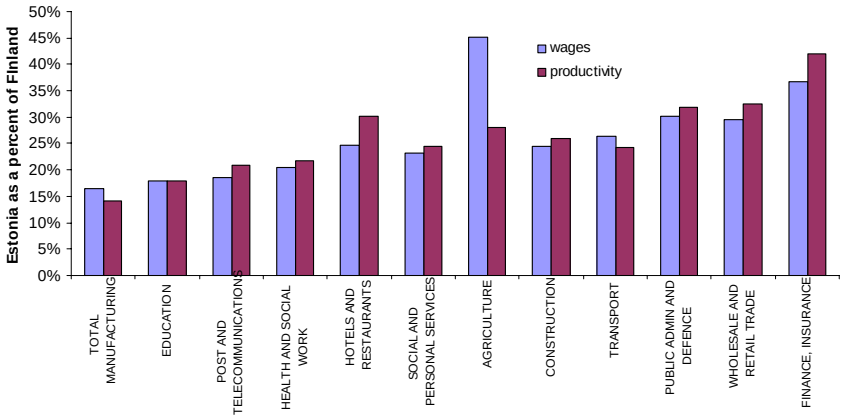
While the macroeconomic implications of different wage bargaining systems are relatively well researched, some recent literature has taken a less conventional look at the microeconomic aspects of wage formation. In particular, it is instructive to see how macro-level wage bargaining institutions generate relative competitive strengths for one or other development model. For example, if centralised and coordinated wage bargaining limits the firm-level adjustment, it is reasonable to assume that businesses will tend to move into product market niches that are less sensitive to competition and open to high specialisation. On the other hand, decentralised wage formation favours the development of companies in markets that are more sensitive to production costs. It has been argued (Soskice, 1999; Hanke and Herrmann, 2005) that coordinated wage-setting systems set wage targets in terms of aggregate productivity, while decentralised systems set wage targets in terms of company- or

plant-level productivity. Thus, the former acts as a productivity whip forcing companies who have lower than average productivity either to rapidly improve productivity or to exit the market. The latter does not have this effect, and weaker companies are neither forced to raise productivity nor to exit the market since they can more easily control production costs. Moreover, in the centralised wage bargaining systems companies and unions tend to pay relatively more attention to "soft" issues, such as work organisation and skills, thus creating a good environment for improving productivity. Overall, it is argued that centralised systems would tend to favour specialisation in high-skilled niche industries (high–quality production), while decentralised wage bargaining would be compatible with low-cost production.

The industry structures of Estonia and Finland are presently very different, and this is reflected also in productivity

Estonia and Finland do certainly represent two different models of industry specialisation. Finnish industry is specialised in three high-productivity industry sectors: electronics, wood and paper, and metal engineering industries. This contrasts with a more diversified Estonian industrial portfolio with a relatively low productivity level. This may be partly a reflection of differences in the overall economic development of the countries. However, the divergence in productivity levels also stands out in the European context, indicating that some other factors, including wage incentives, might influence industry specialisation and productivity. In Finland, the level of industry productivity relative to its national average is high by European standards, while in Estonia it is markedly low (Ameco data). As a result, sectoral productivity differences between the two countries are also especially large in manufacturing (see Chart 4). The same differences in productivity are closely reflected in wage levels, so that the wages are about 6 times higher in Finnish manufacturing, but only 3 times higher in the financial sector. These huge differences explain also the wage pressures and fast convergence after the opening of the Finnish labour market.

Chart 4: Nominal wage and productivity differences (Estonia as % of Finland)



Source: EU Klems, 2004 data

Even industry sectors with a high degree of business integration between the two countries might show vastly different productivity levels. For example, the electronics sector is the most productive in Finnish manufacturing – yet the productivity of the Estonian electronics sector is even lower than the national average. This dissonance reflects typical globalisation synergies where more labour-intensive parts of the production chain are outsourced to low labour cost locations, keeping the more capital-intensive parts at home, which results in large apparent productivity divergences. The vertical specialisation in the Finnish and Estonian electronics sectors appears to exploit the comparative advantages of both economic systems, including different types of wage bargaining.

For now, flexible and differentiated wages in Estonia help attract and sustain cost-competitive industries. However, too much volatility in the labour market may become a weakness in terms of providing a stable and predictable environment for high value added industries, which often require higher investment in physical and human capital and longer investment horizons. Of course, wages are only one element of industrial restructuring towards higher value added production, and education, R&D and industrial policies have an important role to play in this long-term process. Finland's "Nokia" success story illustrates the importance of having a consistent and coherent framework across many different policies (Hirvonen, 2004).

Income distribution and regional unemployment

Differences in wage-setting partly explain differences in income inequality

The lack of regional and skills-based wage differentiation is commonly assumed to induce unemployment among low-skilled workers and in the peripheral regions by pricing out the less competitive segments of the labour market. Indeed, Finnish unemployment in the low educational attainment population segment is higher than in the EU on average. Regional unemployment, measured as the dispersion of regional unemployment rates, is slightly below the EU average. Income inequalities are compensated by a relatively generous social benefit system in Finland. It might be expected that in Estonia higher regional and skill-based wage differentiation would translate into relatively better employment opportunities and lower unemployment in these labour market segments. However, unemployment in these segments is higher than in Finland. The relatively poor employment prospects for the low skilled in Estonia do not seem to be balanced solely by lower and flexible wage costs. The low-skilled unemployment challenges are geographically concentrated in regions that have suffered most from economic transition (eastern and southern Estonia). Structural unemployment of this type cannot be solely remedied by wage-setting policies and should be subject to education, active labour market and regional policies.

Overall, the egalitarian wage outcomes in Finland combined with an extensive social welfare net have resulted in one of the lowest levels of income inequality in Europe, as measured by the Gini coefficient. The much higher income inequality in Estonia is probably as much a reflection of high wage dispersion as the result of a less generous social welfare system and carry-over from the transition years.

Policy implications

If it isn't broken, don't fix it. Both systems appear good in the overall economic setting of the country, but may need to be enhanced to respond to challenges.

Estonia should promote macroeconomic stability

In Estonia, wages reflect different productivity developments and react flexibly to sector-specific shocks, but do not necessarily add up to wage moderation at macro-economic level. The policy challenge is to make sure that wage outcomes are consistent with internal and external imbalances. The side effect of the high degree of wage flexibility in Estonia is the pro-cyclicality of wage growth that increases the likelihood of wage-inflation spirals, erosion of external competitiveness during economic upturns and the need for eventual adjustment, particularly under fixed exchange rates. While the flexibility of Estonian wages should ensure relatively quick adjustment to micro-economic shocks, it could entail undesirable economic and social costs. In the absence of a credible "wage lever" for managing economic cycles, the importance of a counter-cyclical fiscal policy is even more prominent as a policy tool. It will also be important to develop mechanisms that promote macroeconomic stability, such as public sector wage policy.

Finland would benefit from allowing more local level bargaining decisions within the coodrinated framework

The Finnish system seems to have strengths and weaknesses which are the opposite of Estonia's. In Finland, the centralised wage bargaining tends to favour aggregate wage moderation and is consistent with the price stability objective of the ECB. However, this system is less good for wage differentiation across sectors. Finland is highly integrated into the global economy and it needs to respond to different types of shocks, sometimes asymmetric in terms of other EMU countries. This requires a more incentive compatible and flexible wage system. The one-size-fits-all wage setting appears to be too rigid for the heterogeneous sectors and companies that need to compete in the rapidly changing globalising economy. Possible reforms to Finnish wage-setting are currently the subject of heated debate (Alho and Pekkarinen, eds. 2004; Korkman, 2007; OECD, 2006). One solution may be to maintain a centralised level, which settles the aggregate wage growth framework and overall labour market regulations, but to leave individual wage decisions to a greater extent to the local level within the aggregate limits. This approach could maintain the macroeconomic leaver to control cost developments at the same time as increasing local flexibility. It appears that it would be especially crucial for Finland to retain a control mechanism over aggregate wage

More stability in the Estonian labour market could also support high-productivity sectors

developments as the imminent population ageing and declining labour supply could create permanent wage pressures similar to those in Estonia.

In addition to macroeconomic considerations, wage formation mechanisms are also relevant for micro-level development. High dispersion and flexibility of Estonian wages might have favoured development of industries with low value-added which carried over from the transition years of the 1990s. While low-tech production is somewhat inevitable at the current stage of economic development, Estonia needs to consider the strategic question of how to facilitate creation of a knowledge-based economy. Priority should be given to education, R&D, and enterprise development policies. Nevertheless, it is also important to consider whether it would be useful to adjust the wage formation system. Also, social and tax policy should play a more active role in Estonia to counterbalance the inherent income inequality arising from the high wage dispersion.

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