

Mojmir Mrak, Peter Wostner

### **The ability of Slovenia to absorb the EU funds**

The availability of EU resources to recipient Member States is an opportunity that should enable them to achieve their development goals or at least to achieve them more quickly. Nevertheless, availability of resources represents only a necessary external condition that has to be complemented by sufficient internal conditions, which not only enable absorption of funds as such but also their effective and efficient use. The authors, using a systematic analysis of different absorption capacity determinants, come to the conclusion that the Slovenian absorption problems are of a structural character. On this basis, the authors also give short and medium term recommendations for corrective measures which should be implemented in order to improve the absorption itself and to improve their contribution to the development goals of Slovenia.

**Key words:** cohesion policy, development policy, structural funds, absorption capacity

Štefan Bojnec, Matjaž Novak

### **Is intra-industry trade predominant in Slovenian merchandise trade?**

The paper analyses intra-industry trade in Slovenia in the 1992-2002 period. We use the static Grubel-Lloyd index for intra-industry trade and the dynamic marginal intra-industry trade index, which is further decomposed into two parts: the first one comprises horizontal intra-industry trade, the second one covers vertical intra-industry trade. On the basis of detailed calculations on the combined nomenclature at eight-digit classification level, the calculations are shown at aggregated one-digit and two-digit levels for activities classified according to NACE and according to their technology intensity. Apart from the analysis of Slovenian trade as a whole, we separately analyse Slovenia's trade with the EU-15 countries, which accounts for approximately two-thirds of Slovenia's total trade.

We find that with the exception of certain sectors, intra-industry trade flows predominate in Slovenia's trade flows, which confirms the relatively high level of integration of Slovenia's economy in international trade. Contrary to theoretical expectations, however, the formal liberalisation of external trade and economic growth did not substantially contribute to the expansion of intra-industry trade. A marked increase in intra-industry trade was observed only in some trade activities with the EU-15. Our results even indicate that in a number of cases the share of intra-industry trade shrank. However, the shift from intra-industry trade to inter-industry specialisation is of a short-term character, as the share of intra-industry trade is expected to continue growing due to Slovenia's membership in the borderless and customs-free trade within the EU. In most sectors of Slovenia's overall trade, vertical intra-industry trade is much more significant than horizontal intra-industry trade. The predominance of vertical intra-industry trade points to a propensity to utilise comparative advantages at intra-industry level and the presence of trade relocation and the involved factors of production between individual production sub-groups and within the same sub-group.

Aleš Berk

### **Determinants of leverage of the biggest Slovene corporations and influence of the new leverage on the stock performance**

Hypotheses about capital structure are among the most frequently tested in financial literature. Usually, authors discuss different incentives for the use of leverage. Their views can be broadly classified into two main groups. The proponents of the first argue that leverage increases cash flow available to investors. With the use of debt the firm pays less

taxes due to advantageous debt tax-shields. On the other hand, the proponents of the second group stress the importance of transaction cost minimisation and information asymmetry. They point to a pecking order of sources of finance. In this article, I explain the most frequently argued drivers that provide incentives for a more extensive use of debt and test whether they are relevant for Slovenian corporations at the end of economic transition. The second part introduces the owners' point of view. I test whether raised debt levels increase long-term return to stockholders. In the last couple of years, some authors pointed out that new issues of bonds (and debt in general) do not provide positive signals, as supported by proponents of signalling hypothesis. They have even found significant underperformance of the issuing companies' stock (negative long-run returns compared to peers). Thus, new issues of debt may cause similar underperformance effects as new stock issues. In this paper, I use the OLS regression to test for determinants of leverage of Slovenian listed firms (in the prime market and the most liquid ones in the free market). To the largest extent, leverage is determined by profitability (negative relation) and growth opportunities (positive relation). In the second part, testing rests on the OLS regression, bootstrapping and the Fama-MacBeth regression. Results do not support the dependence of stock performance on substantial debt increases.

**Key words:** stock price response, leverage, capital structure, developing markets

Boris Majcen, Miroslav Verbič, Renger van Nieuwkoop, Jože Sambt

#### **An analysis of upcoming developments in the Slovenian pension system with a dynamic general equilibrium model**

The article presents an analysis of macroeconomic effects of the Slovenian pension reform, an analysis of welfare effects in Slovenia and an analysis of effects of the pension fund deficit on sustainability of Slovenian public finances with a dynamic OLG general equilibrium model. It has been established that while young generations and new generations will lose with the pension reform, even complete implementation of the reform will not be sufficient to compensate negative demographic trends. The level of expected deficit of the PAYG pension fund seems to be most worrying. Financing the deficit with VAT revenues as an extreme case could result in more sustainable public finances, since GDP and welfare levels ought to increase, yet this might be difficult to implement politically, given that the generations of voters would have their welfare decreased. In addition, the present pension system is intransparent and tremendously complicated and should primarily be made more comprehensible to the public.

**Key words:** welfare analysis, general equilibrium models, macroeconomic effects, MCP, OLG-GE, pension system, Slovenia, sustainability of public finances

Tomaž Kraigher

#### **Possible development directions of demographic growth and selection of assumptions for the new population projections**

In the article we present an analysis of the possible development directions of individual components of demographic growth (birth rate, death rate and migration rates) and their different combinations, which was used as the basis for selecting and justifying assumptions underlying the new population projections developed by the IMAD. We present the analysis of projection variants up until 2050 based on population data for Slovenia recorded on 31 December 2003 and the new complete life tables for 2000-2002. The assumptions of these projections do not differ substantially from the assumptions used by the Eurostat in its

demographic projections for Slovenia or from the assumptions agreed within a wider working group dealing with the sustainability of the population's ageing in Slovenia. Further, we analyse the impact of different combinations of projection assumptions on the age and socio-economic breakdown of the population; within the latter particularly on the size of the active and retired population. We also present the results of the basic projection of the population, retired population and labour market indicators.

**Key words:** population, demographic development, birth rate, death rate, migration, net migration, projection, coefficients of socio-economic status, persons in employment, retired persons, population ageing.

Jože Sambt

### **Long-term projections of health- and long-term care expenditures with generational accounting method**

Foreseen unfavourable demographic happening will put the pressure on long-term sustainability of public finances; beside the pension system also the health-care system and long-term care system. Among the tools for identifying and quantifying the demographic consequences on all categories of public finances the generational accounting method become most prominent. In the present analysis we modified it appropriately and applied it only for the projections of health care and long-term care expenditures. We assume that age-gender profiles will not change during the projection period and that average expenditures per representative of specific group will grow with labour productivity growth. The results reveal that under those assumptions the share of health care expenditures would increase from 6.5 percent of GDP in year 2004 to 8.6 percent in the year 2050; and the share of long-term care expenditures would increase in this period from 0.8 to 1.8 percent of GDP.

**Key words:** generational accounting, macroeconomic effects, sustainability of public finances, health system, long-term care, Slovenia

Slaven Mičković, Andreja Lenarčič

### **The calculation of potential GDP used to calculate the effects of population ageing**

In the following article we present the estimates and forecasts of the potential output and potential output growth till 2050. These estimates were also used as a basis for the evaluation of the impact of demographic changes on public finances. The potential output was estimated using the production function method and several presumptions about the development of the key variables. The production function method is based on the Solow growth accounting equation, where the potential output growth is the sum of the labour input growth, capital stock growth and total factor productivity growth. Apart from the methodology and our presumptions also the results of the sensitivity analysis are presented. The sensitivity analysis has shown that the results depend on the investment growth and the movement of the employed in public sector. Conversely, the choice of the depreciation rate and the presumption of the wage growth do not affect the final results significantly. For the central three scenarios we have used the 7.5% depreciation rate, the perpetual inventory method of the capital accumulation and have presumed a constant investment output ratio. For these scenarios we have used different demographic projections and different presumptions about the public sector employment. The results, however, are very similar. In all three cases we expect the potential output growth rate to fall from 3.5% at the beginning of the period to 2% in 2030 and then further to 1.3%. The contribution of the capital stock

will be falling during the whole period while the total factor productivity contribution is to remain relatively stable. The contribution of the labour input is negative throughout the period from 2013 on.

**Key words:** long-run potential output growth, potential output, sources of growth, production function method, demographic projections

Mateja Slapar

**Projection of revenue and expenditure of voluntary supplementary pension insurance**

Public finances are highly contingent on demographic trends. They depend on the pension, health care and long-term care systems. The pension system reform has reduced the level of compulsory pension insurance by cutting pensions for people who will retire in the future. These people are to compensate for the shortfall by participating in voluntary supplementary collective pension insurance schemes. This paper focuses on the analysis of supplementary voluntary collective pension insurance schemes. The analysis is based on data for 2004 provided by pension and insurance companies offering collective pension insurance in Slovenia. The analysis includes projections for the number of insured persons, premiums, the number of pensioners and the value of the total mathematical reserves up until 2050. Calculations show that the number of pensioners will have risen to approximately 600,000 by 2050, taking into account that the first pensions from this insurance will be disbursed after 2011.

**Key words:** voluntary supplementary pension insurance, projection of the number of insured persons, projection of the number of pensioners, projection of revenue and expenditure, macroeconomic effects, Slovenia.