# IV ECONOMIC SUBSYSTEM

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# SLOVENIA AND THE WORLD - STATISTICAL COMPARISON Bogomir Ferfila

Abstract Slovenia is compared with three groups of countries: the OECD group, the group of newly industrialized countries and the group of former socialist countries. Different economic, political and social indicators are divided into several groupings: 1. domestic economic strenght (GDP, growth rates etc.); 2. internationalization (balance of trade, export, import etc.); 3. government (total debt, government employment, tax system etc.); 4. infrastructure (telephones, electricity generation); 5. management (productivity); 6. science and technology (expenditure on research and technology, personnel); 7. human resources (labor force, education, employment etc.).

In most indicators Slovenia is well abead of the rest of the former socialist countries and on the level of the most developed newly industrialized countries (Singapore, Hong Kong, South Korea) and less developed OECD countries - Greece, Portugal, Ireland, Spain (far above Turkey).

economic development, international comparison, economic indicators

## I. DOMESTIC ECONOMIC STRENGHT

## 1. PERFORMANCE OF THE ECONOMY

#### 1.1. GDP

According to the Emerging Market Economies Report Slovenian Gross Domestic Product in US\$ millions at current prices and exchange rates was only 8,998 for 1991. This could make GDP per capita<sup>1</sup> just US\$ 4.494.9, which would still place Slovenia first among former communist countries, but well below comparable OECD countries like Greece (US\$ 7,015), Portugal (US\$ 6,485) or Taiwan (US\$ 8,598) and South Korea (US\$ 6,540) from the group of newly industrialized economies.

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Even if we take into account more favourable statistical data (according to *Knjige sveta* Slovenian GNP per capita in 1991 was US\$ 6,307) the relative position of Slovenia would not change. But certainly it would be significantly closer to the above-mentioned countries. In both cases Slovenia would surpass only Turkey (US\$ 1,283) out of the group of 23 OECD countries (Switzerland, Sweden, Japan, Denmark, Norway, Finland, USA, Canada, Austria, France, Belgium, Luxembourg, Italy, Germany, Netherlands, United Kingdom, Australia, Spain, New Zealand, Ireland, Greece, Portugal and Turkey).

Most of this group have a GDP per capita of somewhere between US\$ 17,000 and 27,000. But it is quite a different story if we consider the quite reliable statistical data from the CIA Report and Encyclopaedia Britannica. Here Slovenian GDP in 1991 was US\$ 21 billion (10,700 per capita according to CIA Report) and 20.3 billion (1990) in Encyclopaedia (GNP) (some US\$ 10,312 per capita). In per capita terms Slovenia would be third among the newly industrialized countries (surpassed by Singapore and Hong Kong), while in the OECD group Slovenia would leave Greece and Portugal far behind and come close to Ireland, New Zealand and Spain (with GDP per capita between US\$ 12,300 and 13,500).

The average GNP per capita in 1991 was US\$ 21,020 for OECD members, US\$ 2,670 for Europe, US\$ 2,390 for Latin America and the Caribbean, US\$ 1,940 for the Middle East and North Africa, but only US\$ 320 for South Asia, US\$ 650 for East Asia and the Pacific and US\$ 360 for Sub-Saharan Africa. Thus the world average GNP per capita in 1991 was US\$ 4,010.

#### 1.2. REAL GDP GROWTH RATES

Like most of the transitional economies (exceptions are China and Vietnam) Slovenia faces a contraction in economic activity and thus negative real GDP growth rates (in 1992: -6%, in 1993 0%). In 1994 positive growth rate is expected (also in Hungary, Czech Republic and for the second consecutive year in Poland).

## 2. COST OF LIVING-RENT

The average monthly rent for a comfortable unfurnished 3 room apartment in Ljubljana was about US\$ 500 in 1991. That is about the same as the average monthly rent in Portugal, Austria and Sweden, which varied between US\$ 520 and 550 and a little higher than in Belgium & Luxembourg (US\$ 420) and in Turkey (US\$ 300). The majority of the OECD group had an average monthly rent between US\$ 600 (Canada, Denmark) and US\$ 1,000 (Italy). The most expensive are rents in Switzerland, USA, Spain (around US\$ 1,300), United Kingdom (US\$ 1,680) and Japan (US\$ 3,830).

Slovenian (Ljubljana) average monthly rent in 1991 was also relatively low compared to rents in the NIC.<sup>2</sup> Only in Mexico, South Africa and Hungary were rents in 1991 under US\$ 500; in Malaysia US\$ 510. Rents in Thailand, Brazil, Singapore, Taiwan, Korea and India were from US\$ 1,000 to 1,900. In Indonesia rents were almost the same as in Japan (US\$ 3090) while in Hong Kong they hit a record US\$ 5,810.

## II. INTERNATIONALIZATION

## 1. BALANCE OF MERCHANDISE TRADE

In 1991 Slovenia had a surplus in its balance of merchandise trade of US\$ 351 million (in 1992 US\$ 541.9 million) which represented 3.9 percent of its GDP. This was among the highest in the transitional economies (only Lithuania with 9.13 percent and Russia with an amazing - probably the worlds highest - 25 percent had better results). Most of the OECD countries also achieved smaller percentage - the majority were between 4% and -2%. As a rule the smaller countries achieved the best results: Belgium & Luxembourg 11.86%, Norway 8.23%, Ireland 8.01%.

Within the group of newly industrialized countries Venezuela, South Africa, Chile and Indonesia had the highest merchandise trade surpluses ranging from 4.12% (Indonesia) to 8.97% (Venezuela), while Pakistan, Hong Kong, Thailand and Singapore were at the bottom with merchandise trade deficits ranging from -5.26% (Pakistan) to -10.32% (Singapore).

#### 2. BALANCE OF TRADE IN TOTAL SERVICES

In 1992 Slovenia had a positive balance of US\$ 396.7 million in non-factor services (transport, travel, merchanting, leasing, other) and -92.3 million US\$ in factor services, which represented 2.5% of Slovenian GDP (US\$ 12,240 million). Compared to the data for OECD and the NIC group (for 1991) thet would put Slovenia ahead of most countries. In the OECD group, only Austria (7.15%), Switzerland (7.06%), Belgium and Luxembourg (6.21%) and Greece (3.41%) had a higher relative balance of trade in total services than Slovenia. Among the NIC only Singapore had a higher balance (22.04%), the rest of the countries achieved a lower (most of them negative) balance of trade in total services.

#### **3. CURRENT ACCOUNT BALANCE**

In 1992 Slovenia had a positive current account balance of US\$ 931.8 million (and US\$ 102,3 million in direct investment and other long-term capital), which represented 7.61% of Slovenian GDP. That would put Slovenia: ahead of all OECD countries, followed by Norway, Belgium & Luxembourg and Switzerland with current account balance around 4.5% (all data for OECD and the

NIC group are for 1991) of their respective GDP. 14 OECD countries had a negative current balance in 1991.

Among the NIC's only Singapore had a higher current account balance than Slovenia, measured as a percentage of GDP (10.52%). Most of the NIC group also had (like the OECD group) a negative current account balance in 1991.

#### 4. TRADE TO GDP RATIO

In 1991 Slovenia also had one of the world's highest trade to GDP ratios (Exports + Imports divided by GDP x 2). Slovenia's ratio of 52.56 was exceeded only by Armenia (121.00) - but with a huge deficit in balance of merchandise trade, Belarus (54.55) and Russia (138.49) among the transitional economies; Belgium & Luxembourg (107.90) and Netherlands (61.05) among the OECD economies and by Singapore (196.72), Hong Kong (144.12) and Malaysia (90.52) among the newly industrialized countries.

#### 5. EXPORTS OF GOODS AND SERVICES

In 1991 Slovenia exported US\$ 4,905 million worth of goods and services, which represented 54.51% of its GDP. Within the group of transitional economies only Armenia (55.68%) and Russia (151.00%) had higher percentages (EMER, 1993).<sup>3</sup>

Among OECD countries Slovenia's percentage was exceeded only by Belgium & Luxembourg (112.63%), Netherlands (63.33%) and Ireland (55.79).

As with the OECD group, Slovenia's percentage of exports of goods and services in GDP is exceeded only by three economies: Singapore (202.58%), Hong Kong (140.40%) and Malaysia (85.55%). Thus Slovenia found itself in the top ten in terms of ratio of exports to GDP (out of a sample of 58 countries).

Slovenia will probably even improve its position. The fact is that in the period 1990-1991 Slovenia had an extremely high negative annual percentage change in exports of goods and services (-15.2%), which was one of the highest in the world (exceeded only by Russia - 29.4%, Uzbekistan -41.7%, Macedonia -15.6% and Lithuania -22.1%). By 1992 though, the negative trend had already reversed. The annual percentage change in growth in exports of goods and services based on US\$ export values was 13.5% (an 8% increase in exports of goods, a 35% increase in exports of non-factor services, mostly due to growth of tourism). In 1993 approximately 3% growth is expected (in non-factor services, mostly tourism and transport, up to 15%).

Slovenia expects further progress because of its gradual entrance into European integrations. By 1995, a free trade area with the countries of the Vysegrad Group (Hungary, Czech Republic, Slovak Republic, Poland) is expected to be completed. In fact, there are serious

studies and discussions now being undertaken on creating, not a revived COMECON, but a new economic and trade association of the countries of Central and Eastern Europe, including perhaps the republics of the former USSR. Not forgotten are India and China who are moving closer and closer to most of the former communist countries.

Slovenia was never a member of COMECON. Especially due to the near complete loss of the markets of the former Yugoslav republics (in 1992 the amount of trade was less than 20% of the 1990 level; in 1993 it is expected to come close to 10% of the 1990 amount; no further improvements are expected until 1997) it has to play on several fronts - western economic integration being of primary importance, while trying to expand in the markets of the former communist economies as well.

Thus Slovenia should not only maintain but also improve real export growth rates. In 1994 a 4% real growth in exports - excluding trade with the former Yugoslav republics - is expected (2.4% increase in exports of goods and a 10.0% increase in exports of non-factor services), in 1995 5% real growth (4% and 9%), in 1996 6% (5.4% and 8%) and in 1997 6.5% (6% and 8%) real growth in exports is expected.

According to expected positive growth rates of Slovene exports, the percentage of exports compared to GDP should also gradually increase. While in 1993 it is expected to reach 57.3% of GDP (45% exports of goods and 12% exports of non-factor services), in 1997 the percentage of exports should reach 62.7% of GDP (47.9% exports of goods and 14.8% exports of non-factor services).

Today there are only six countries in the WCR (World Competitive Report) and EMER (Emerging Market Economies Report) out of 58 countries which have a higher ratio of exports to GDP than Slovenia (Russia, Singapore, Hong Kong, Malaysia, Netherlands and Belgium & Luxembourg).

#### 6. EXPORT MARKET DIVERSIFICATION

In 1992 Slovenia achieved 54.4% of export market diversification measured as percentage of exportmarket value dominated by the top 3 destination countries (in the case of Slovenia: Germany, Croatia and Italy). Compared to the OECD group (data for 1991) only two economies, namely Belgium & Luxembourg and Canada had worse market diversification.

Compared to the NIC (also data for 1991) Slovenia would be somewhere in the middle (most of the countries varied between 43% and 58%).

## 7. IMPORTS OF GOODS AND SERVICES

In 1992 Slovenia imported US\$ 6,141 million worth of goods and services, which represented 50.2% of the Slovenian GDP. Only two OECD countries (Netherlands and Belgium & Luxembourg) and two countries out of the NIC group (Malaysia and Singapore) had higher imports of goods and services measured as a percentage of their GDP than Slovenia (OECD and NIC data are for 1991).

#### 8. TOURISM REVENUES

In 1992 Slovenia earned US\$ 669.9 million in tourism revenues from abroad, which accounted for 5.5% of Slovenian GDP. This would put Slovenia among the top "tourist countries" - in the OECD group only Austria with 8.50% and Portugal with 6.05% achieved higher percentages, while in the NIC group Singapore with 10.97% and Hong Kong with 7.24% of their GDP had the only higher percentages (all data for 1991).

## III. GOVERNMENT

#### 1. CENTRAL GOVERNMENT TOTAL DEBT

According to the EMER Slovenian total debt in 1991 was US\$ 3.75 billion, which represented 41.7% of its GDP. According to CIA data total debt was only US\$ 2.5 billion, 8.4% of Slovenian GDP. With such a percentage Slovenia would be among the least indebted countries in the world. None of the OECD economies had smaller relative indebtedness - closest to Slovenia are Switzerland (10.3%) and Finland (10.9%). Within the NIC only Taiwan had a smaller percentage (2.6%) and North Korea came close with 9.9%. China had an extremely low percentage in 1991 (2.3%), while a little higher were Belarus (3.4%), Kazakhstan (5.7%) and Romania (5.9%).

In 1991 Slovenia had a balanced budget, while most of the OECD countries and the NIC experienced a deficit (highest was in the USA US\$ 219.4 billion and in Italy US\$ 122.8 billion).

#### 2. OFFICIAL RESERVES

In 1991 Slovenia had US\$ 773 million worth of official reserves. According to the Bank of Slovenia, foreign exchange reserves in 1991 were US\$ 365 million an in 1992 US\$ 1,163 million (estimate for 1993 is 1,468 million).

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#### 3. CENTRAL GOVERNMENT BUDGET SURPLUS/DEFICIT

In 1991 and 1992 Slovenia had a budget surplus of 2.7% and 0.3% of GDP respectively. The forecast for 1993 is -0.9%, for 1994 -1.9%, for 1995 -1.3%, for 1996 -1.1% and for 1997 -0.3%. Thus Slovene deficit is forecasted to be approximately 1% of GDP per year what would put Slovenia on 10th place among 23 OECD countries (their data for 1991). The upper nine countries realized smaller deficits or bigger surpluses (the highest percentage - nearly 4% surplus in Sweden, 1.5% in New Zealand). The lower 14 countries realised higher deficits - from 1.5% to 5% (majority). Only three countries realised much higher deficits - Turkey 7.33%, Italy 10.67% and Greece 13.8% of their GDP in 1991.

#### 4. CENTRAL GOVERNMENT FOREIGN DEBT

In 1991 Slovenia's foreign debt was US\$ 1,886 million (in 1992 only 1,741 million). While the debt servicing ratio in 1991 was 8%, in 1992 it dropped to 5.2%.

In 1991 foreign debt represented 15.4% of GDP, putting Slovenia among the most highly indebted OECD countries. Only Belgium & Luxembourg with 15.9%, New Zealand with 31.4%, Ireland with 43.5% and Greece with 65.9% of GDP had a higher central government debt ratio to their GDP.

#### 5. GOVERNMENT EMPLOYMENT

In 1993 Slovenia had approximately 765,000 people employed and self-employed while in the government sector (In Slovenia defined as Government sector of enterprises and institutions) approximately 139,500 employees. Thus government employment represents approximately 18% of total employment. Such a percentage would put Slovenia somewhere in line with New Zealand which takes 10th position in the OECD group. The highest percentage (around 30%) is that of the Scandinavian group (Norway, Denmark, Sweden) and Belgium & Luxembourg. Japan had the lowest percentage (6%), followed by less developed OECD countries (Portugal, Ireland, Spain) and Switzerland (between 11% and 14%).

The NIC group had on average (data for OECD and NIC groups are for 1990) a much lower percentage of government employees than Slovenia (mostly between 3% and 7% of total employment).

#### 6. MILITARY EXPENDITURE

According to the CIA in 1991 Slovenian military expenditure was US\$ 945 million, which represented 4.5% of the GDP; one of the highest percentages of GDP absorbed by nonproductive military consumption in the world. Among OECD countries only Turkey (4.6%), USA (5.4%) and Greece (5.5%) exceeded Slovenia, while among the NIC's there was Chile (4.6%), Taiwan (4.7%),

Singapore (5.39%) and Pakistan (6.7%). The majority of the former Eastern Bloc countries varied between 2% and 2.7% of GDP, which can also be said for most of the OECD countries. Quite a few countries out of a OECD group (namely Austria, Japan, Ireland, Switzerland, Spain, New Zealand, Denmark) had military expenditures of only between 1% and 2% of their GDP.

#### 7. GOVERNMENT SUBSIDIES

In 1991 government subsidies in Slovenia to private and public enterprises (excluding capital transfers to infrastructure) represented 3.50% of GDP. Among OECD countries higher percentages were achieved only by Sweden (4.50%), Norway (5.82%) and Ireland (7.02%). In most market oriented economies (USA, Great Britain, Turkey, Japan) government subsidies were much smaller - between 0.5% and 0.9% (in New Zealand only 0.26%) of GDP. The biggest OECD group had government subsidies between 1.4% and 3.1% (Greece, Switzerland, Netherlands, Australia, France, Canada, Germany, Italy, Portugal).

#### 8. TAXATION

#### 8.1. INDIRECT TAX REVENUES

In 1991 taxes on goods and services in Slovenia represented 10.2% of GDP (in 1992 10.8%; estimate for 1993 12%).

Such a percentage would put Slovenia somewhere in the middle of the OECD countries, which varied between 4% and 17%. Most of the NIC group had smaller indirect tax revenues as a percentage of their GDP (between 5% and 8%).

Such a high percentage in Slovenia is inherited from the former socialist tax structure when most of the government revenue was collected in very simplistic manner - through wage taxation and sales tax.

#### 8.2. PERSONAL INCOME TAX

In 1991 personal income tax in Slovenia represented 6.3% of GDP (14.5% of government revenue). In most of the OECD countries income tax had a much stronger position in budget financing, and also compared to their GDP. Only in Greece, France and Portugal the percentages were smaller (around 5.5%), while most of the OECD group varied between 7.5% and 13.5%. In three countries (New Zealand, Finland, Canada) income tax represented 17-18% of GDP, while in Sweden 20.3% and in Denmark as high as 28.1%.

#### 8.3. CAPITAL AND PROPERTY TAX REVENUES

Further proof that Slovenia is still a "tax heaven" (besides the low percentage of income tax contribution) is the extremely low percentage of capital and property tax revenues. In 1991 capital and property tax revenues represented only 0.6% of total government revenue. Among the OECD group only Turkey had a smaller percentage (0.1%) while most of the countries varied between 1.3% and 5.0%. Six countries (Switzerland, United Kingdom, Canada, Australia, Japan, Belgium & Luxembourg) had a percentage between 7.5% and 10%, while in the USA capital and property tax revenues are the highest, accounting for as much as 16.2% of GDP.

#### 8.4. CORPORATE PROFIT TAX

In 1991 corporate profit tax in Slovenia represented just 0.6% of GDP. None of the OECD countries or the NIC's had a smaller percentage. Usually the percentages varied between 1.5% and 4%. The highest percentage was reached in Japan (6.9%) among the OECD group, and 15% in Chile (among the NIC's).

#### 8.5. TAXES ON PETROL

Compared to the OECD group in 1992 Slovenia had less than the average percentage of taxes on petrol - 58.3 for unleaded petrol, which would put it in 6th place (below USA, Japan, New Zealand, Australia and Canada, which varied between 33% and 49%).

The rest of the OECD countries had a higher percentage of taxes on petrol than Slovenia (between 62% and 77%).

#### **8.6. SOCIAL SECURITY CONTRIBUTIONS**

The major difference in Slovenian government revenues (and expenditures) compared to the OECD group is the extremely high percentages of social security contribution (in 1991, 19.7% of GDP and 45.2% of total government revenue). None of the OECD countries or the NIC's had such a high percentage (compared to GDP).

Most of the NIC group had none or very low social security contributions (below 2% of their GDP). In the OECD group Turkey, Australia and New Zealand had no social security contributions at all (neither from the employer's or the employee's side). Surprisingly, two Scandinavian countries - Denmark (1.47%) and Finland (2.83%) - had very low social security contributions. That is probably the result of a different approach in data gathering and not in a low level of social security in real terms. Most of the OECD group varied between 8% and 13% of GDP (usually contributions from employer's side are greater than from the employee's side).

In 1991 the highest social security contributions were reached in the Netherlands (18.07% of GDP) which was still more than 1% less than Slovenian social security contributions.

Having completed the analyses of the most important sources (taxes) of government spending (except customs and import duties which in Slovenia are much higher than in OECD countries) we might point out some general remarks.

First of all, the level of government revenues in Slovenia compared to GDP is high - in 1991 43.7%, in 1992 56.9% and in 1993 48.2% (projection). A high level of state (government) consumption was typical for all former communist countries (in 1989 total government expenditures as a percentage of GDP varied from 48.1% in Poland to 76.6% in Czechoslovakia) and it will take quite some time before Slovenia will be able to lower its government consumption.

#### IV. INFRASTRUCTURE

#### **1. ELECTRICITY GENERATION**

Slovenia produced 6,329 Kwh of electricity per capita in 1991. Such production placed Slovenia somewhere in the middle of the OECD group (the majority varied between 2,733 and 9,045 Kwh per capita). None of the NIC's exceeded Slovenian per capita production, while among former communist countries higher results were achieved in Estonia (10,759 Kwh), Lithuania (7,828 Kwh) and Russia (7,207 Kwh per capita).

#### 2. TELEPHONES

Slovenia is also faring quite well in terms of the number of telephones in use per 1,000 inhabitants. There were no counterparts among former communist countries - in 1991 Poland had 93.1 and Hungary 91 telephones per 1,000 inhabitants, while in Slovenia there were 329 telephones. Among the NIC's only Hong Kong (426.7) and Singapore (384) had more telephones relative to population, South Korea (315.8) and Taiwan (306) lagged a little behind, while the rest of the group was far behind (less than 100; Pakistan, India and Indonesia with less than 10).

Compared to the OECD countries, Slovenia would be placed close to the bottom, although strongly surpassing Turkey (122.3), Portugal (226), Ireland (280.7), a little more than Spain (323.5), but lagging behind Italy (387.6), Greece (392.5), Belgium & Luxembourg (400.9), Germany (401.1) and Austria (418.0). The rest of the group varied between 447.9 (Japan) and 683.3 telephones per 1,000 inhabitants (Sweden).

#### V. MANAGEMENT

#### **1. OVERALL PRODUCTIVITY**

In 1991 overall productivity in Slovenia measured as GDP per person employed was US\$ 11,459 (EMER) or US\$ 26,716 (CIA).

Among former communist countries the closest to Slovenia, were Hungary (5,799) and Poland (4,840), among NIC's Singapore (26,240), Hong Kong (25,577), Taiwan (20,822), South Africa (19,407) and South Korea (US\$ 15,233 per person employed). The rest of the countries from both groups lagged far behind.

In the OECD group Slovenia's position varies only a little according to different data (EMER or CIA). In both cases Turkey (US\$ 5,538) is left far behind. Slovenia is either in front of or behind Greece with 17,735 and Portugal with US\$ 12,684 of GDP per person employed. The rest of the group had much higher figures: from New Zealand (29,115) and Australia (38,313) to France (54,217) and Switzerland (US\$ 65,208 per person employed).

## 2. PRODUCTIVITY IN MANUFACTURING

In measuring the productivity of manufacturing as manufacturing value added per manufacturing worker (EMER data) Slovenia with US\$ 9,312 was the first among the emerging market economies (according to EMER consisting of Estonia, Armenia, Kyrghyzstan, Moldova, Lithuania, Macedonia, Croatia and Slovenia as smaller markets; Uzbekistan, Czechoslovakia, Belarus, Kazakhstan, Ukraine, Bulgaria, Romania, Hungary and Poland as middle-sized economies and of three "giants": China, India and Russia).

Only Poland, with US\$ 8,360 of manufacturing value added per manufacturing worker, came close to Slovenia. In the group of NIC's Slovenia came close to Brazil (US\$ 10,981) and lagged behind the leading five (Hong Kong, South Korea, Mexico, Taiwan and Singapore with values from US\$ 13,456 to US\$ 22,873).

In the group of OECD countries Slovenia Surpassed Ireland (6,561) and Turkey (6,561), probably Portugal (no data available) and came close to Greece (US\$ 10,149). The rest of the group is far ahead - starting with New Zealand and United Kingdom (around 26,000) and all the way to Japan (54,851) and Finland (US\$ 49,530 of manufacturing value added per manufacturing worker).

#### **3. LABOUR PRODUCTIVITY**

Results in labour productivity were quite similar to results in manufacturing. Slovenia, with US\$ 6.65m of value added per employee per hour in 1991, was far ahead of any emerging marker economies. Closest to Slovenia were Czechoslovakia (2.89) and Poland (US\$ 2.86).

Approximately the same (countries as in manufacturing) in the NIC and OECD groups were also ahead of Slovenia in productivity.

## VI. SCIENCE AND TECHNOLOGY

## 1. TOTAL EXPENDITURE ON RESEARCH AND DEVELOPMENT

In 1990 Slovenia spent US\$ 274.0 million on R&D (only for research organisations and not for the whole activity in Slovenian enterprises), which represented 1.60% of its GDP. This figure compares well with the rest of the countries. In the former communist group this figure was exceeded only by Belarus (1.90), Hungary (1.93) and Czechoslovakia (2.05); in the NIC's by Taiwan (1.69) and South Korea (1.83). In the OECD group Slovenia came exactly in the middle - 11 countries lagging behind (from Portugal, Greece and Turkey with approximately 0.5% of GDP to Italy, Canada, Austria and Denmark with approximately 1.5% of GDP) and 11 countries ahead of Slovenia (from Belgium & Luxembourg, Norway, Finland and the Netherlands ranging from 1.65% to 2.21%) to the top countries Japan (3.08%), Switzerland (2.86%), Germany (2.81%) and the USA (2.72%).

## 2. TOTAL R&D PERSONNEL NATIONWIDE/INDUSTRY

In 1991 Slovenia had 13,340 full-time work equivalent personnel in research and development, 39% working in industry.

Among former communist countries only Estonia (48.0%), Czechoslovakia (45.9%) and Romania (50.0%) had higher percentages of their total R&D personnel employed in industry.

Sixteen OECD countries had higher percentages (from Spain with 44.4%, Italy with 46.9%, Canada 48.1% and Finland with 51.0% to the Germany with 69.5%, Switzerland with 78.2% and USA with 83.2% of their total R&D personnel employed in industry. Six OECD countries had smaller percentages than Slovenia (Turkey 33.1%, Ireland 31.6%, New Zealand 31.4%, Australia 30.5%, Greece 18.9% and Portugal 18.8%).

## **VII. PEOPLE**

## 1. POPULATION

In 1991 Slovenia had 2 million inhabitants (as of 30 June 1993 exactly 1,994,431), with an annual compound percentage change of 0.47%. Thus Slovenia is one of the worlds smallest countries; there were 136 countries which had more and 56 countries which had less inhabitants than Slovenia (in terms of territory Slovenia is in 149th place with its 20,256 km<sup>2</sup>). Population density in 1991 was 97 inhabitants per square kilometre, which would put Slovenia in 13th place among OECD countries (just below Austria with 93), and in 69th place in the world.

Slovenia had one of the lowest percentages of population under 15 years of age (20.6%) among the former communist countries and the NIC's. Only Hungary, with 19.9% and Bulgaria with 20.2%, had lower percentages.

Among OECD countries the picture is reversed. Most (15) had smaller percentages, only Turkey, Ireland, New Zealand, Australia, USA and Canada had higher percentages of population under 15 years than Slovenia.

The situation is a little different with elderly people. With 10.8% of total population over 65 years in 1991 (as of 30 June 1993 11.64%) Slovenia is somewhere around the average percentage of the group of the former communist countries. All the NIC's had much lower percentages.

Among OECD countries all but two (Turkey with 4.3% and Australia with 10.8%) had higher proportions of people over 65 in their total population than Slovenia.

Particularly because of the low level of young population (under 15 years) Slovenia had a quite low dependency ratio (population under 15 and over 64 years old, divided by active population between 16 and 64 years). Only four OECD countries (Japan 43.5%, Netherlands 44.5%, Germany 45.3% and Italy 45.6%) and three NIC's (Singapore 41.0%, Hong Kong 42.5% and South Korea 44.1%) had a lower dependency ratio than Sovenia (45.8%).

Life expectancy at birth in 1991 was 68.8 years for men (49th place in the world) and 76.7 years for women (32nd place in the world).

## 2. LABOUR FORCE

The active population (employed and registered unemployed) in Slovenia numbered 920,000 in 1991, which represented 46.'% of the Slovenian population (EMER). This is around the average

figure for the former communist group and the OECD countries, while the NIC's, with their strong agricultural sector combined with a young population, had a much higher percentage.

According to figures from the Slovenia Statistical Office Slovenia had an active population of 837,202 (745,041 employed and 91,161 unemployed). If we compute the percentage of female labour force out of these data we get 46.6% of the total labour force; one of the world's higher percentages.

Out of the NIC and OECD group only two countries, Sweden with 47.9% and Finland with 47.0%, had a higher participation of female labour in total labour force.

#### **3. PUBLIC EXPENDITURE ON EDUCATION**

In 1991 Slovenia spent US\$ 277.4 on education per capita. That was by far the largest amount among the former communist countries (Hungary with US\$ 160 was second and Poland with US\$ 80.7 per capita was third). Three out of four "Asian tigers" (Taiwan with US\$ 423, Singapore with US\$ 322 and Hong Kong with US\$ 315) surpassed Slovenia in the NIC group, while only three OECD countries lagged behind (Turkey with 25, Grece 127 and Portugal US\$ 220 of public expenditure on education per capita). The rest of the OECD group had much higher amounts, ranging from around US\$ 500 per capita (Ireland, Italy, Spain) to US\$ 2,000 per capita (Norway and Sweden).

#### 4. HIGHER EDUCATION ENROLLMENT

In 1991 20% of the 20-24 year-old population was enrolled in higher education in Slovenia. This was a relatively high proportion for the former communist group (only Estonia with 24%, Bulgaria with 26%, Ukraine with 48% and Russia with 28% were ahead of Slovenia)<sup>4</sup> and also for the NIC group (higher percentages) were in Venezuela 28%, Singapore 35% and Korea 38%).

Compared with OECD countries, the situation is quite different. Only Turkey (13%) and Portugal (18%) had smaller enrollment, while the rest of the group much higher (with United Kingdom, Switzerland, Ireland, Greece, Italy, Sweden, Japan, Austria, Spain, Netherlands, Germany, Denmark, Australia between 24 and 32%; Belgium & Luxembourg, Norway, France, New Zealand and Finland between 34 and 43%; and the USA with 63% and Canada with 66% of the 20-24 year-old population enrolled in higher education.

#### **5. ILLITERACY**

According to EMER Slovenia had a 1.3% adult (over 15 years) illiteracy rate (as a percentage of population). According to *Knjige sveta*, the illiteracy rate was much lower - only 0.1%.

No country in the NIC group had a lower percentage (the "Asian tigers" varied between 3.7 and 13.9%). In the OECD group the illiteracy rate was high in Turkey (19.3%), Portugal (15%), Greece (7%), Spain (5%) and Italy (3%). The majority of the group varied between 1% and 2%, while Japan, Norway and Switzerland were 100% literate.

#### 6. EMPLOYMENT/UNEMPLOYMENT

In 1991 Slovenia had 850,000 people employed (in 1993 only 791,000) and 75,000 unemployed (in 1993, 126,000). Thus enemployment (measured as a percentage of the labour force) in 1991 was 12.3% (in 1993, 13.7%).

In 1991 none of the NIC's had the same of higher unemployment, while in the OECD group it was higher in Finland (12.7%), Spain (16.5%) and Ireland (17.2%).

A particularly critical aspect of unemployment in Slovenia is youth unemployment (measured as unemployment of the population under 24 years, as a percentage of total unemployment). In 1991 youth unemployment was 47.2%. None of the former communist countries had higher percentages. Among the NIC's the percentage was higher in Taiwan (53.4%), Thailand (57.2%), Indonesia (79.2%) and Brazil (59.3%); among OECD countries only in Italy (48.7%) and Turkey (55%).

#### 7. EMPLOYMENT BY SECTOR

Slovenia had more or less the same pattern of employment distribution by sector as the most developed (OECD) countries: a small percentage in agriculture (6.6%), a bit too high percentage in industry (39.4%) and a majority (a bit too small percentage) in services (54%).

Out of the former communist countries only Croatia had approximately the same pattern (4.3%, 44.6%, 51.1%); the same was valid for India among the NIC's (5.5%, 36.6%, 58.1%). The rest of the countries in the above-mentioned groups have a pattern which is typicall for developing countries (a very few, such as China, Kyrghyzstan, Thailand, Indonesia and Pakistan, have an employment distribution typical for udeveloped countries - a majority or large part employed in agriculture, the rest distributed between industry and services).

In the OECD group Turkey had a pattern typical for undeveloped countries (with 47.8% in agriculture); Greece (24.5%, 27.4%, 48.2%) and Portugal (23.1%, 34.7%, 42.2%) that of the developing countries (approximately the same percentage in agriculture and industry, far too big in agriculture).

Over 10% of the population were employed in agriculture in 1991 in Ireland (15%), Spain (15.2%) and New Zealand (10.6%).

Nine OECD countries had employment in agriculture between 5% and 9% (Australia, Austria, Denmark, Finland, France, Italy, Japan, Norway, Switzerland). Seven OECD countries had less than 5% of their population employed in agriculture (Belgium & Luxembourg, Canada, Germany, Netherlands, Sweden, USA and United Kingdom).

#### 8. WORKING WEEK

Compared to the rest of the former communist group, in 1991 Slovenia had a rather long working week consisting of 42 hours (measured as hours per week paid per worker in manufacturing activities), exceeded only by China (48 hours) and Czechoslovakia (42.5 hours). Among the NIC's all the countries had a longer working week (from 45 to 51 hours), while in the OECD only Turkey had a longer working week (48.2 hours); the rest of the group varied from 31 to 41 hours (majority between 37.4 hours and 41.6 hours).

#### 9. POPULATION PER DOCTOR

In 1991 Slovenia had 371 inhabitants per doctor, which would put it in 10th place among OECD countries (right after Germany with 357 inhabitants per doctor and Austria with 345, up to Italy and Spain with less than 300 inhabitants per doctor). The rest of the OECD group varied between 380 and 680 inhabitants per doctor except Turkey which had as many as 1,275 inhabitants per doctor.

None of the NIC's had less inhabitants per doctor which reflects the strong welfare orientation of the former socialist regime in Slovenia. Compared to the rest of the world in 1991 there were only 32 countries (out of 193) which had less inhabitants per doctor than Slovenia. Slovenias position is even better according to another indicator - number of inhabitants per hospital bed. With only 83 inhabitants per hospital bed, Slovenia was 19th in the world.

#### **10. CENTRAL GOVERNMENT EXPENDITURE ON HEALTH**

In 1991 Slovenia spent 5.0% of its GDP on health insurance. Because of the different institutional arrangements in health care services and the fact that Slovenia was a constituent part of the Yugoslav federation before 1991, later data are probably more accurate. In 1992 Slovenia spent 7.3% of its GDP on health and in 1993 as much as 7.7 (estimate).

In 1991 none of the OECD countries spent a larger proportion of their respective GDP on health than Slovenia (the highest percentages were in the Netherlands, with 6.6%, and France with 6.5%). Most of the NIC group spent less than 1% of their GDP.

Low "health consumption" among OECD countries is probably due to the fact that health expenditures are the resposibility of lower, local or municipality governments and not the central government as in Slovenia. Such conclusion is also confirmed by the World Develop-

ment Report 1993. The so-called established market economies (more or less the OECD countries) had an average 9.2% of their GDP spent on health in 1990. The group of former socialist economies of Europe spent 3.6% of GNP on health services, Latin America 4% and the world average was 8%.

#### **11. NEWSPAPER CIRCULATION**

In 1990 daily circulation of newspapers in Slovenia was 112 per 1,000 inhabitants. That would put Slovenia in 19th place among OECD countries. Italy (107), Spain (82), Turkey (72) and Portugal (38) had a smaller circulation, the rest of the group varied between 150 and 600 newspapers per 1,000 inhabitants.

Slovenia daily circulation is approximately the same as the world average (Statistical Yearbook estimated circulation for 1990 was 111 for world total, 332 for Europe, 248 for North America, 64 for Asia and 17 for Africa).

#### NOTES

1. It is generally accepted that per capita calculated criteria favour small countries like Slovenia, Singapore and Denmark.

2. According to The World Competitiveness Report the group (sample) of newly industrialized countries (NIC) consists of 15 countries: India, Brazil, Mexico, Pakistan, South Africa, Indonesia, South Korea, Venezuela, Chile, Hungary, Thailand, Taiwan, Malaysia, Hong Kong and Singapore.

3. As far as ex-USSR is concerned there is an unsolved problem of different exchange rates used in converting the export and import values into US\$. The comparison with GDP, in the case of former USSR republics, is therefore distorted. Moreover, Slovenia is traditionally present in Western markets, while data on ex-USSR republics include trade with former USSR republics.

4. The statistical data for Bulgaria and Ukraine are questionable. High enrollment might lead one to expect also a high percentage of population holding at least one university degree. While Slovenia had 11.4%, Bulgaria had only 3.2% and Ukraine only 0.06% of their population with a university degree.

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