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# BENCHMARKING OF ECONOMIC FRAMEWORK CONDITIONS AT COMPANY LEVEL

**Internal location assessments reflect the subjective view of a company, which ultimately determines its locational choice. For the purposes of economic policy, the diverse results thus obtained and the fact that they persistently stand in contradiction to external analyses of competitiveness are of special interest. A comparison of assessment processes and criteria shows that internal location assessment is no substitute for external analyses of competitiveness, but nevertheless provides useful additional information.**

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Since the 1980s, the assessment of the competitive positions of individual countries and the analysis of locational factors have been an integral part of the scientific and economic-policy debate in Austria as in other countries. The issue of "competitiveness" has assumed considerable importance within the economic-policy framework, not least through the annual publication of international country rankings in terms of their competitiveness (most recently *IMD,* 2000, *WEF,* 2000). A well-founded, quantitatively based system of assessing the competitiveness of business locations, has established itself in Austria since the late 1980s. This system extends beyond the scope of country rankings[1], which are based on controversial methods and designed to attract media attention.

*Benchmarking*, a system which has been used for the purposes of comparative sectoral and macroeconomic assessment at the company level for quite some time, is based on the analysis of the competitiveness of countries, but takes the method one step further. Benchmarking is defined as a comparison of performance which explicitly looks for the best process or the "best practice".

*The use of benchmarking in the analysis of competitiveness has introduced a new quality to the debate on locations, as it rigorously measures (individual) locational factors in a given country against the best processes of the "competitors" (i.e., other countries).*

From the company's point of view, a distinction must be made between internal and external assessment procedures. Internal assessments are defined as analyses performed either by the company itself or by others, such as consultants, on its behalf, whereas external assessments are performed by outsiders, such as public institutions, research institutes or consultants operating independently of the company.

## Benchmarking as an innovative tool of location analysis

A large number of external analyses of Austria as a business location and its competitiveness are available. The studies are open to the public, and the methods used, as well as the results obtained, are widely known[2]. The manner in which companies assess business locations internally (i.e., from their own point of view) had not been investigated systematically in Austria prior to the study by *Böheim* (2000) – except for *Aiginger – Peneder* (1997), who did not, however, elaborate on the internal assessment procedures used.

It is only by indirect channels, i.e., in press, TV and radio interviews, that the results of internal assessments become known to the public. Very often, the grounds for the criticism expressed in such interviews remain unclear. The public – and even economic policy-makers – pay great attention to such contributions to the debate on locational qualities, but without any detailed understanding of the process whereby top-level executives form an opinion on business locations. As a rule, internal assessments of this type – as

[1] For a comprehensive critique of the theory and the results of country rankings, see *Peneder* (1999B).

[2] Current (external) location studies for Austria – some of them based on European or international comparisons – include *Aiginger – Peneder* (1997), *Böheim* (1999A), *KPMG* (1999), *Peneder* (1999C), *Pfaffermayr* (1999).

reflected in the statements made by top managers – tend to be *less favourable* than the quantitative results of external location analyses.

## Location assessment as an instrument of analysing structural characteristics and competitiveness

External location assessment procedures are based on a comparative analysis of economic growth, market shares, production costs, productivity and research activities, the assumption being that the sectoral structure of production and foreign trade is a suitable indicator of the development level of an economy. Essentially, location analysis, as defined above, is equivalent to an analysis of structural characteristics and competitiveness. This being the case, international comparisons allow conclusions to be drawn with regard to the (relative) competitiveness of countries.

According to empirical evidence, it makes sense for industrialised countries to specialise in quality-oriented and highly productive industries as well as sectors in which competitiveness depends on a highly qualified labour force. International comparisons indicate that such technology and marketing-intensive sectors develop particularly dynamically and guarantee a high wage level.

In Austria, this type of industrial structure corresponds to reality only to a limited extent, even though the overall assessment of the macroeconomic development by company managers reflects a very positive mood. Traditional sectors of industry with below-average or average research and development activities dominate the economic landscape in Austria far more than they do in other European countries. Nevertheless, the satisfactory macroeconomic development and the continuous growth of value added and exports show that Austrian companies from these "traditional" sectors are doing well on the world market. Whereas Austria was still lagging far behind the countries of the European Union in terms of industrial productivity in 1988, the country now ranks third behind Ireland and Belgium, but ahead of the Netherlands, Finland and Germany. This trend is likely to persist in the future: for 2001 and 2002, WIFO expects an industrial growth of 4.5 and 5.0 percent, respectively, and productivity increases of a similar order of magnitude.

Fast-growing high-tech companies contribute less to the economic prosperity of Austria than highly productive enterprises in traditional industries (*Böheim,* 1999A). These low and mid-tech enterprises make use of the possibilities of advanced information and communication technologies as well as innovative organisational concepts in order to focus on and expand their core activities, which in turn results in a more effective division of labour and further increases in productivity. Owing to Austria's geographical location, less productive activities can be outsourced to the countries in transition in Eastern Europe.

Two factors underlie this favourable situation: on the one hand, unit labour costs in goods production have declined by an average of 3.3 percent per year since 1990 in comparison with Austria's trading partners (*Guger*, 1999); besides a restrained wage policy, productivity increases have been the main driving force of this development. On the other hand, the fiscal framework has been improved and the time taken by official approval procedures is shorter than it used to be. Telecommunication and energy costs are declining as a result of progressive liberalisation, and open borders with the countries of Central and Eastern Europe are proving to be a considerable asset.

However, regardless of the satisfactory performance of Austrian industry and the contribution made by the traditional sectors, the persistent structural deficit in the high-technology sector should not be overlooked. On a medium- to long-term basis, the country's under-specialisation in technology-intensive sectors could well have an adverse effect on the development of the Austrian economy.

## Internal location benchmarking

In order to establish the criteria and processes applied in internal location assessment, WIFO carried out a survey among the top-level executives of 11 companies with multinational activities (five of them based in Austria and six based abroad). The companies surveyed employ a total labour force of about 35,000 in Austria and generated sales of ATS 110 billion in 1999. The average head count is 3,200 and average annual sales amount to ATS 10 billion. According to the definition of the target group, the results of the survey are representative of "large" companies – by Austrian standards – but not of Austrian companies in general.

The industrial managers were asked to rank 30 locational factors in terms of their competitive importance and to indicate their degree of satisfaction with the prevailing condition of the locational factor in Austria. Seven of these factors relate to "production costs", eight to "future-oriented investments" (qualification, research and development, infrastructure), six to the "organisation of markets" (conditions of demand, competition, cooperation), seven to the "role of the state" (legislation and public administration, state

aid, regulation), and two to the "societal framework". Figure 1 shows the aggregate results of the top-executive survey of Austria as a business location.

## Benchmarking as a method of internal location assessment

"Benchmarking" is defined as the continuous monitoring of individual results and achievements under comparable conditions, the objective being to initiate and maintain a continuous process of improvement by learning from the best results obtained, to adapt these "best practices" to one's own company, and thus increase one's own competitiveness.

*All the top executives surveyed preferred benchmarking as a method of internal location assessment.*

Numerous companies intensively benchmark themselves against others to assess and improve their own competitiveness. The widespread use of the method is due to the simplicity of its fundamental concepts and the ease with which it can be applied to concrete problems encountered in business practice.

Basically, companies use three variants of benchmarking:

- *Intra-company benchmarking* compares several operating sites on the basis of management ratios. The comparison is based on production and productivity figures as well as financial ratios.
- *Inter-company benchmarking* also uses management ratios as a basis and includes competing enterprises for purposes of comparison. The idea is to identify the "best process" not only in one's own company, but also in competing companies. Given the fact that many of the operations performed in an enterprise are independent of the field of business, even companies in other sectors may lend themselves to such comparisons.
- Companies may also be interested in the *benchmarking of locational factors*. Whereas the two variants described above focus on the business entity, location benchmarking compares economies at the macroeconomic level.

*Benchmarking of macroeconomic framework conditions is of little interest to companies, unless its results can be related to the situation of the individual enterprise in concrete terms.*

All the companies surveyed perform intra-company and inter-company benchmarking at the company level as part of a continuous internal improvement process. Location benchmarking, however, is applied by no more than two thirds of the companies – and only when they are confronted with concrete investment decisions. By and large, companies decide against location benchmarking, because the locations of (new) operating sites are often determined by exogenous factors (e.g., market entry, sub-contractors).

*The managers surveyed provided little detailed information on the methods used for location benchmarking.*

The companies that perform location benchmarking normally use standardised procedures developed within the company, possibly with the assistance of external consultants. Given the fact that, as a rule, location benchmarking is performed during the preparatory planning phase prior to the implementation of investment projects, the decision on whether to benchmark or not is always taken by the top management of the company. The local management and/or the product group management is intensively involved in the planning and decision-making process and plays an important role in gathering data and the concrete assessment of on-site conditions. Few companies resort to external consultants for the assessment procedure. For the majority of companies, location benchmarking is a purely internal task to be carried out in close co-operation between the commercial and technical divisions of the enterprise.

*Internal location assessment reflects the subjective view a company has of a given business location. Thus, it can be regarded as being complementary to external location analyses. For economic policy, the value of internal location assessment lies in the indication of locational shortcomings.*

For reasons of confidentiality, none of the managers interviewed would provide written documents containing anything other than general points of information. Even the oral information given by the managers was insufficient for evaluation. However, one important point was clearly demonstrated in the study: *location assessments and, subsequently, decisions in favour of or against a particular location are determined not only by objectively verifiable, quantitative criteria, but – to a considerable extent – also by qualitative elements.*

On account of the distortion resulting from subjective interests, the outcome of internal location assessment is more difficult to verify objectively than external analyses of competitiveness.

## Results for Austria as a business location

Even though the managers questioned considered all five locational dimensions ("production costs", "future-oriented investments", "organisation of markets", "role of the state", "societal framework") to be factors which exert an important influence on competitiveness, *innovation and qualification* (under the heading of "future-oriented investments") were felt to be of outstanding importance.

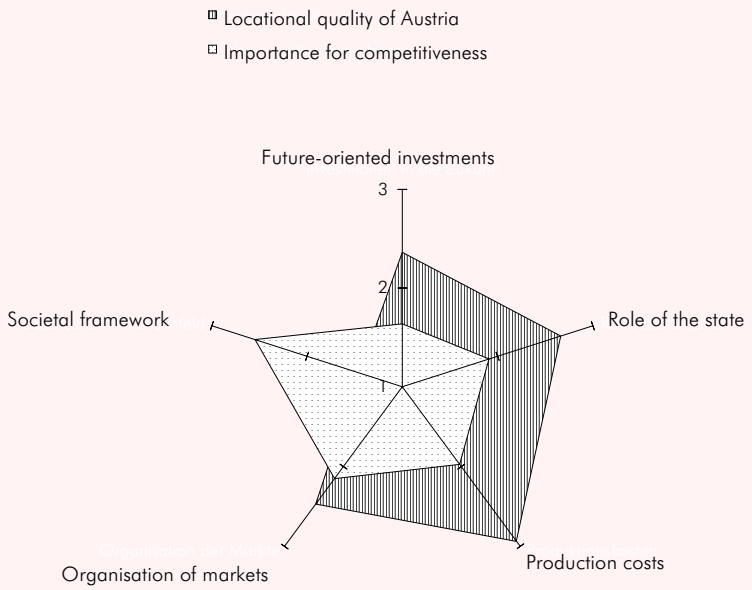
The emphasis put on the responsibility of the state for an efficient system of public administration and business-friendly legislation confirms the fact that the economic framework is assuming an ever greater importance for the quality of a business location. A change of paradigm, which has already had some impact at the political level, can be observed in the field of state aid to business: while state aid to private-sector activities is still considered to be an essential locational factor, companies would prefer a shift from direct state aid to fiscal support for business.

*From the viewpoint of the companies surveyed, innovation and qualification are the keys to international competitiveness.*

Figure 1 enables us to make an initial, general statement on the attractiveness of Austria in comparison with alternative locations with regard to the categories listed. The greatest assets of Austria as an industrial location are perceived to be the *societal framework* and the *qualification and motivation* of the labour force; while all other factors are rated average to satisfactory, excellent ratings are not given in any of the other categories. Production costs, the *innovation potential* and the *regulatory system* are rated between average and not very satisfactory.

*Figure 1: Aggregate results of the survey on Austria as a business location*

*Mean value of ratings on a scale from 1 ("very high") to 5 ("very low")*




Source: *Böheim* (2000).

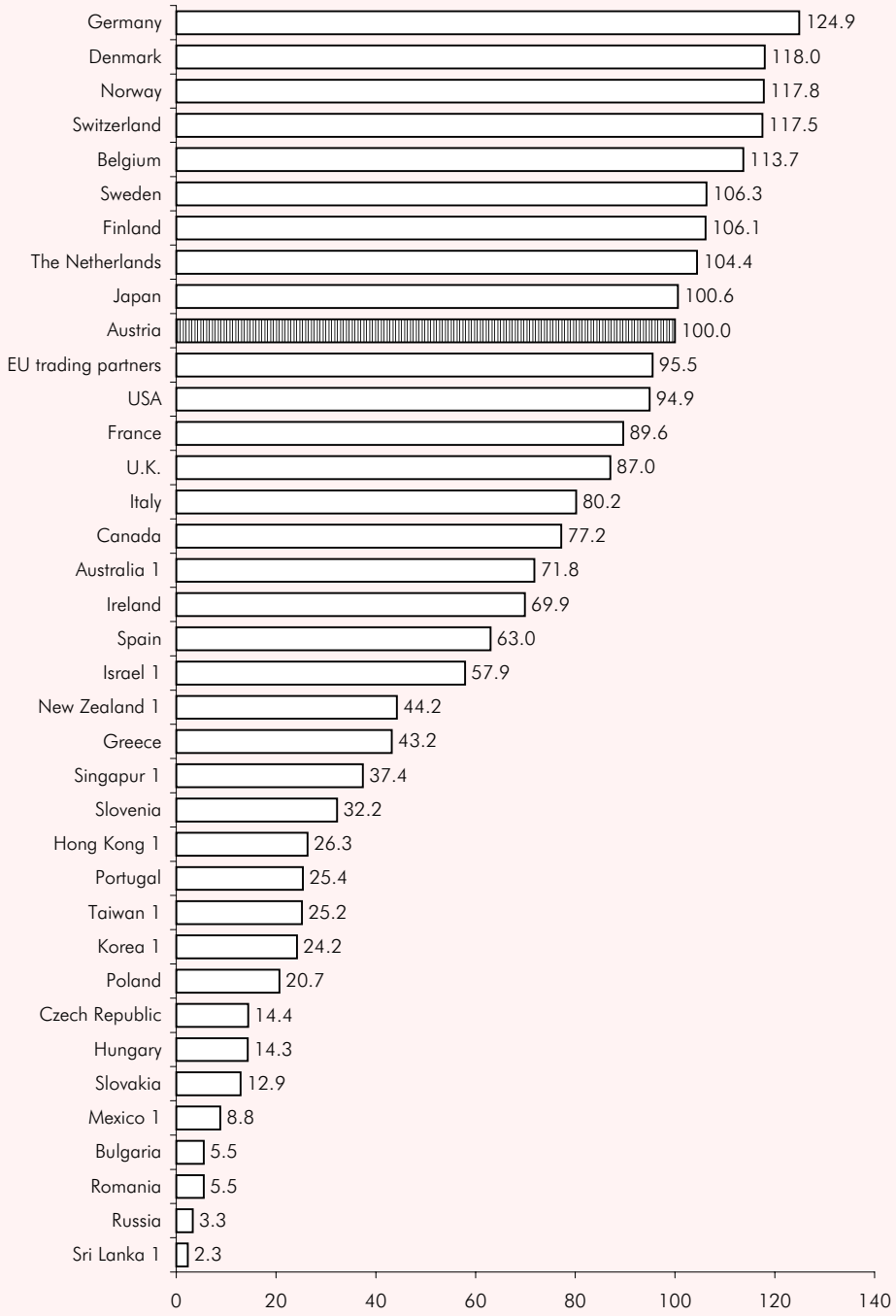
## Results in contradiction to analyses of structural characteristics and competitiveness

Sometimes, the dividing line between an objective analysis and the subjective view of locational factors by enterprises is blurred. As the statements by top managers on the quality and shortcomings of the location show, both elements are contained in internal location assessments. What is stressed is that current locational factors are of the greatest relevance for benchmarking purposes. Past improvements are not taken into account in this comparison of static indicators. Hence, location benchmarking produces relatively unfavourable results for Austria, although the locational quality of the country has improved noticeably in recent years. This catching-up process is documented by the dynamic indicators of external location studies, but not yet reflected in the static indicators.

Moreover, the way in which companies assess individual locational factors sometimes contradicts the results of external assessments. High labour costs, a below-average research ratio, the inefficiency of the public administration, and the inconsistencies of Austrian fiscal policy are often referred to by companies as locational shortcomings in Austria.

*Figure 2: Labour costs in manufacturing*

*1999, on ATS basis, Austria = 100*




Source: Eurostat; European Commission, Economic Forecasts; Austrian Economic Chamber; Swedish Employers' Federation; U.S. Labor Office; Institut der deutschen Wirtschaft; WIIW. – [1] 1998.

## Labour costs

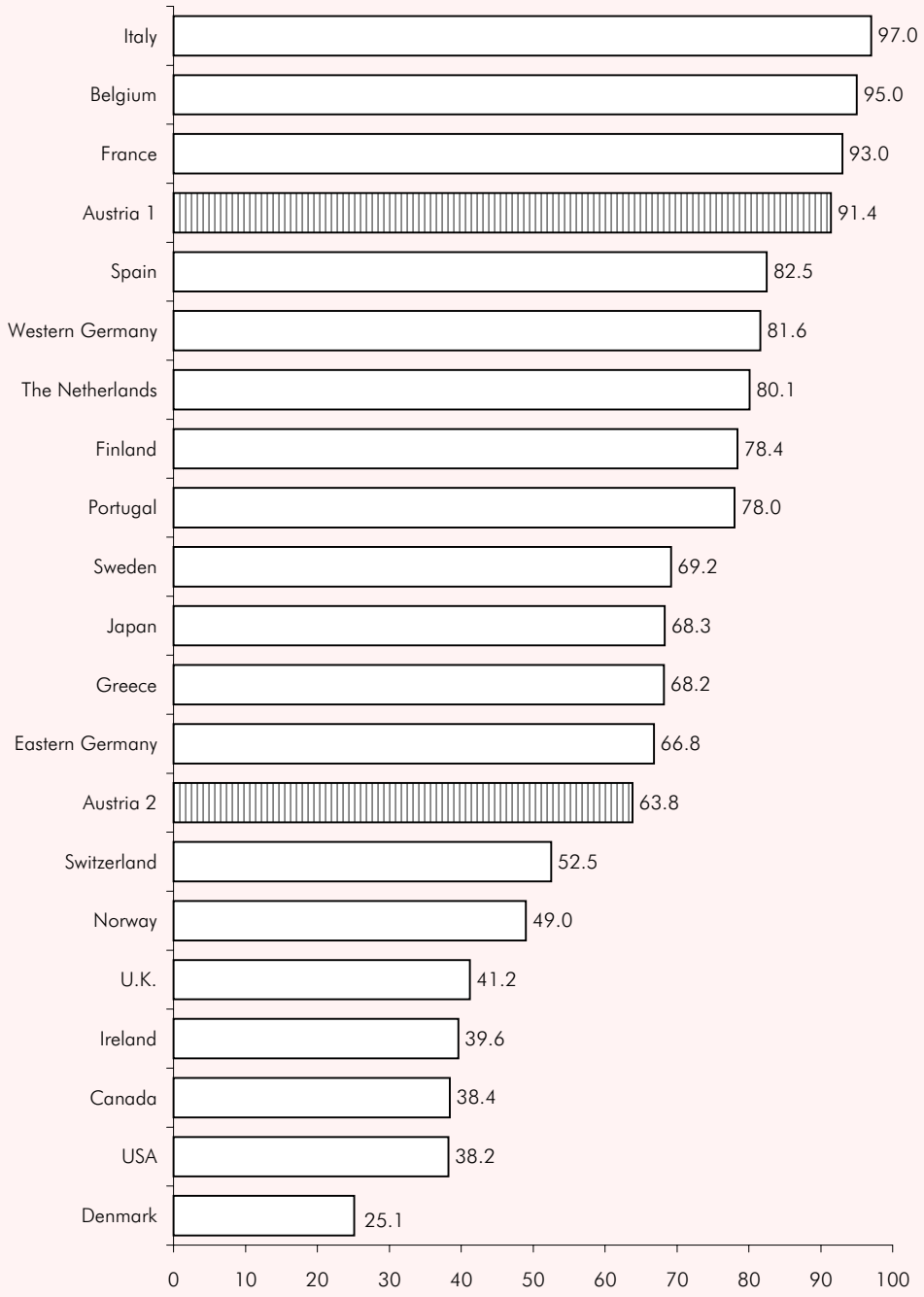
By international standards, Austria is among the countries with a high level of labour costs[3]. In the manufacturing, unit labour costs in 1999 amounted to about ATS 265 in Austria, which is 4.5 percent above the EU average. Austria takes tenth place after Germany, the Scandinavian countries, Switzerland, the Netherlands and Japan (Figure 2). A relative deterioration has been observed in comparison with Austria's most important trading partners: compared with the trading partners, labour costs increased by

[3] Labour costs comprise wage costs and non-wage labour costs. In Austria, the share of non-wage labour costs is distorted through the inclusion of tax-privileged bonus payments (13th and 14th monthly wages). If these bonus payments were included in wage costs, the corrected non-wage labour cost rate would be 63.8 percent (*Guger*, 2000), which is quite competitive at the international level (Figure 3).

an average of 1.3 percent per year between 1990 and 1999. In 1999, unit labour costs in the Austrian manufacturing were 4.2 percent higher than the comparable values of the trading partners (*Guger*, 2000).

*Figure 3: Non-wage labour costs as a percentage of wage costs*

*1999*




Source: *Guger* (2000). – [1] Including 13th and 14th monthly wages. – [2] Excluding 13th and 14th monthly wages.

However, labour costs alone are insufficient as an indicator of the competitiveness of a country. Unit labour costs (in relative terms) are a more reliable measure of locational quality, as this parameter also considers the productivity of labour. In this respect, Austria is doing well by international comparison: both hourly productivity and unit labour costs have developed favourably over time, a fact which is duly recognised by the company executives questioned (Figures 4 and 5). Thus, the assessment of the Austrian level

of labour and unit labour costs by industrial managers largely corresponds to empirical data.

*Figure 4: Hourly productivity in manufacturing*

*Year-to-year percentage changes 1990-1999*


Source: *Guger* (2000). – [1] From 1996 manufacturing. – [2] From 1996 including Eastern Germany. – [3] Weighted average of trading partners according to recalculation of WIFO exchange rate index.

## Research spending

As regards the research ratio, Austria is lagging behind other countries (Figure 6) because of its industrial structure. Austria's successful economic performance is based not so much on fast-growing high-tech enterprises, but on highly productive enterprises in traditional sectors of industry. Investments in research and development are clearly lower in these industries than in the high-tech sector – hence the below-average research ratio. However, any criticism based solely on research ratios would be inappropriate and not do justice to Austria's innovative potential (*Leo*, 1999). A relatively high innovation ratio and a ratio of new product commercialisation which is "merely" average suggest

that Austrian enterprises are strongly focused on the continuous improvement of their products and processes. Thus, the frequently criticised innovation deficit of Austrian enterprises is non-existent at the sectoral and/or company level.

*Figure 5: Unit labour costs in manufacturing*

*Year-to-year percentage changes 1990-1999 on ATS basis*


Source: *Guger* (2000). – [1] Weighted average of trading partners according to recalculation of WIFO exchange rate index.

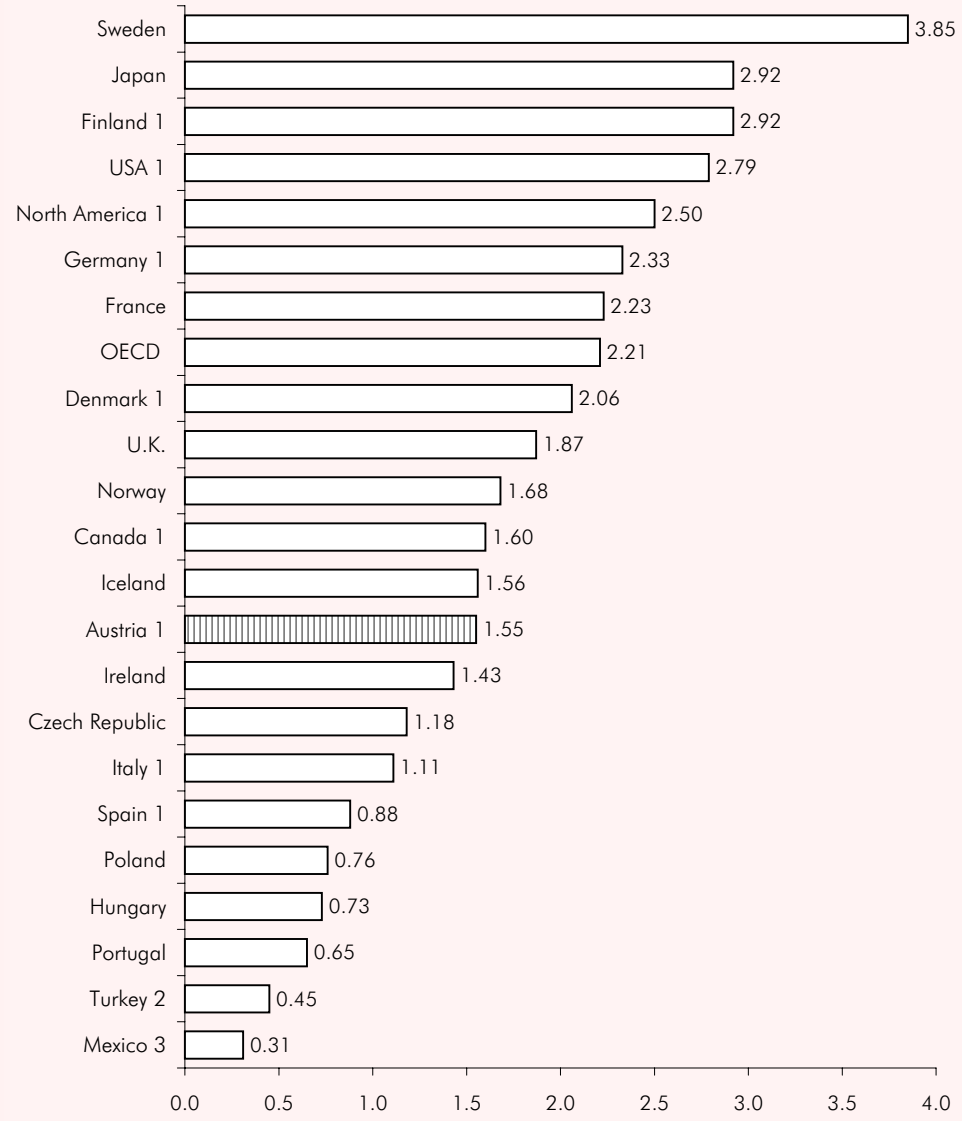
## Efficiency of the public administration

The target of the most vigorous and most frequent criticism in the public debate on Austria's locational qualities is the *public administration*. However, such across-the-board criticism is unjustified – at least with regard to plant approval procedures. In a study of 57 plant approval procedures in 11 countries, Austria (with some regional differences) received an excellent rating (*Jeglitsch – Mészaros-Knoll*, 2000). In particular, the organisation of the administrative procedure, including on-site proceedings in the presence of all those concerned, and the decision by administrative letter, which is subject to appeal and may be issued in conditional form to accelerate the conclusion of the matter, would appear to be exemplary. Some criticism has been voiced, however, of the considerable

regional differences, which are thought to be due to the varying degrees of commitment and motivation on the part of the administrative officers involved.

*Figure 6: Total research and development expenditure*

*As a percentage of GDP, 1997*




Source: OECD, MSTI Database. – [1] 1998. – [2] 1995.

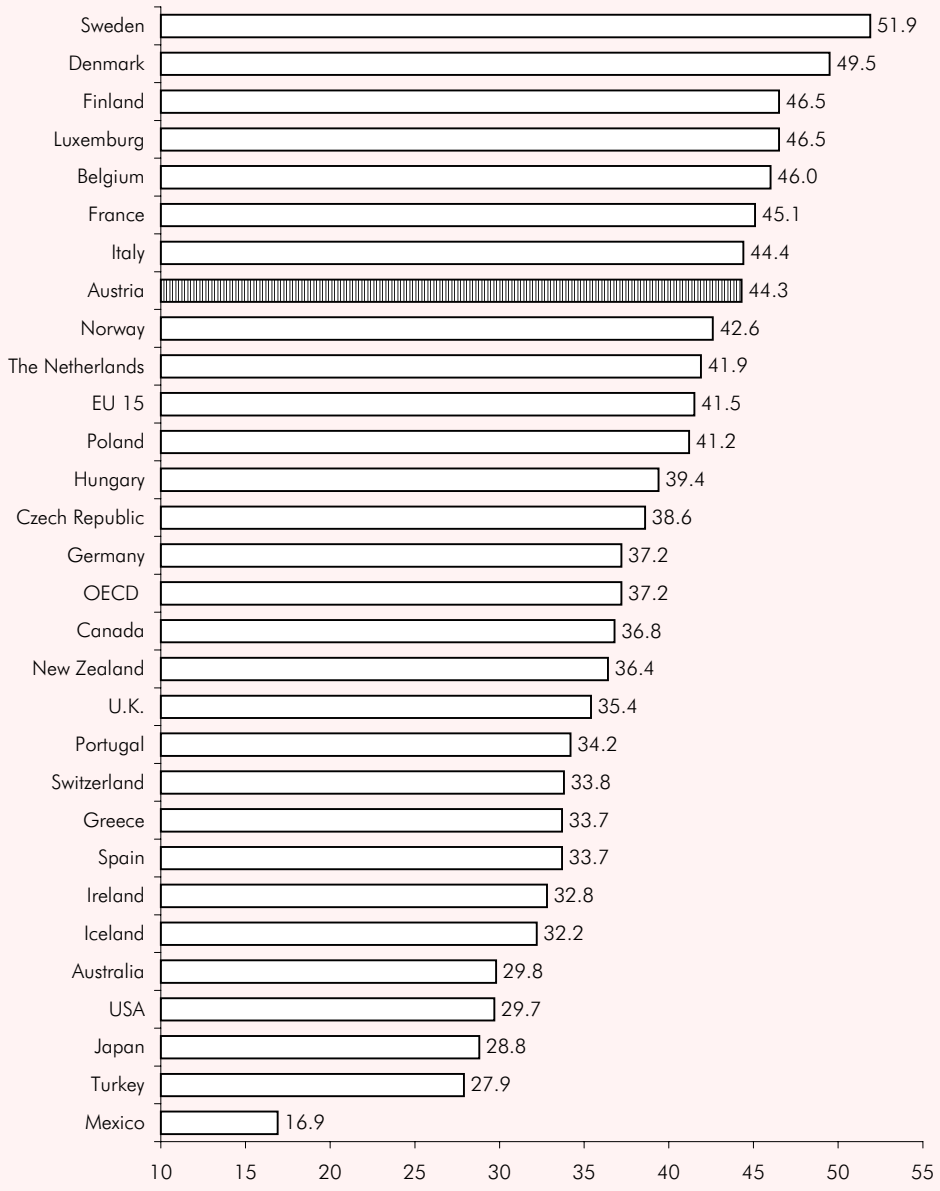
A potential for improvement can be perceived in the sequence of steps involved in the procedure. Introduction of the "one-stop shop" principle and the elimination of the three-step chain of appeal could result in a further improvement of quality and a significant reduction in the duration of the procedure. Further improvements should be possible through the adoption of uniform plant approval legislation. It might also be worth considering offering financial incentives (premiums) as a means of increasing the motivation of the administrative officers concerned.

**Continuity of the fiscal system and the tax burden**

The *tax ratio* of different countries (total burden due to taxes and social charges relative to GDP) is compared in internal location analyses. Given the relatively high level of social charges, this ratio, which is 44.3 percent of GDP in Austria, is clearly above the OECD (37.2 percent) and EU (41.5 percent) averages. The USA and Japan have even lower tax ratios of 29.7 and 28.8 percent, respectively (Figure 7).

*Figure 7: Tax ratio*

*Total tax revenues (including social charges) as a percentage of GDP, 1997*




Source: *OECD* (1999C).

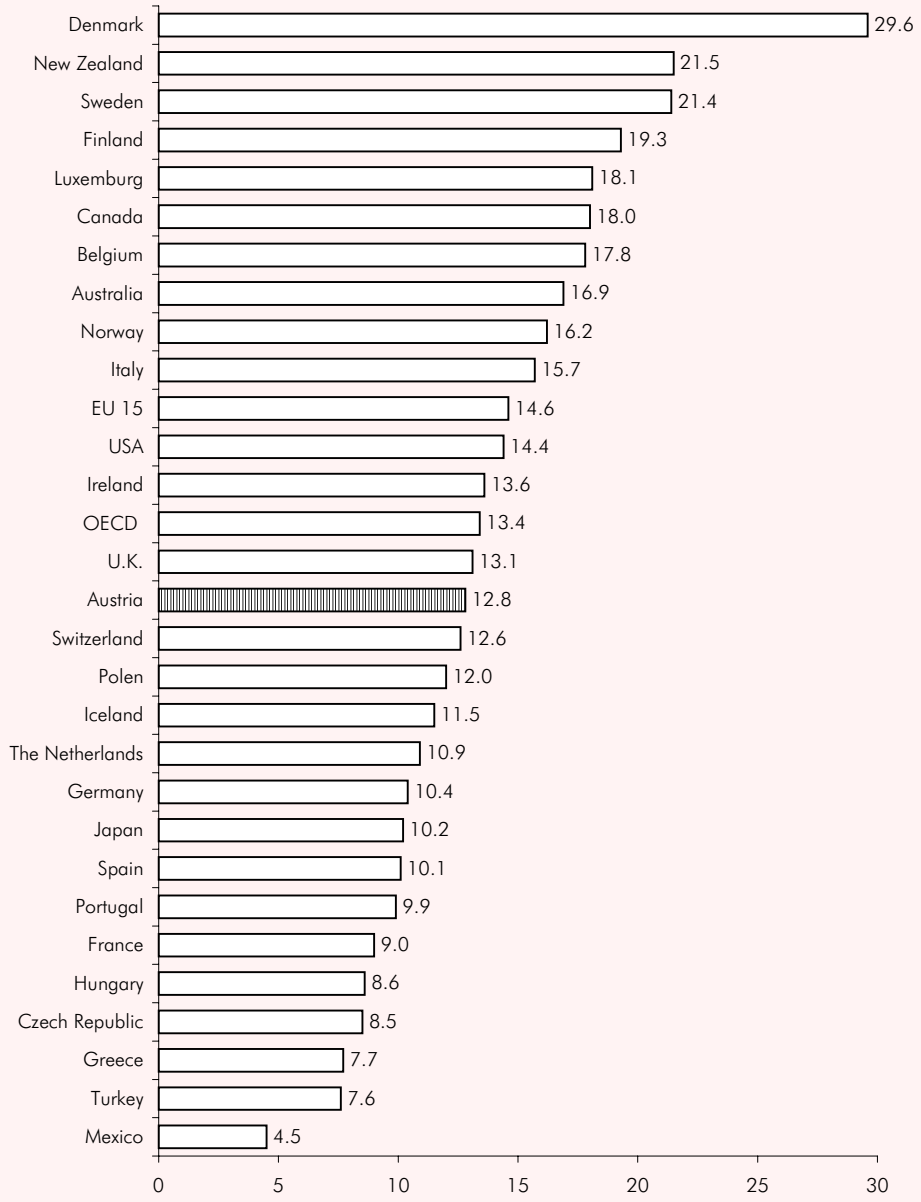
However, Austria compares favourably with other countries in terms of *direct taxes* (taxes on income and corporate profits) (Figures 8 and 9). Hence, the criticism voiced by the business community with regard to the comparatively high personal and corporate income tax rates is not fully justified.

What is justified, however, is the criticism directed at the lack of consistency of the Austrian tax system[4], which makes any medium- to long-term investment and tax planning difficult for companies. It appears that a consistent tax system which enables companies to engage in long-term planning is perceived to be far more important than a low tax burden. Hence, companies regard a greater degree of continuity and consistency in the tax system as particularly desirable.

[4] Since their entry into force in 1998, there have been 56 amendments to the Income Tax Act and 23 amendments to the Corporate Tax Act (source: Legal Information System of the Federal Chancellery).

*Figure 8: Personal income taxes*

*Tax revenue as a percentage of GDP, 1997*




Source: *OECD* (1999C).

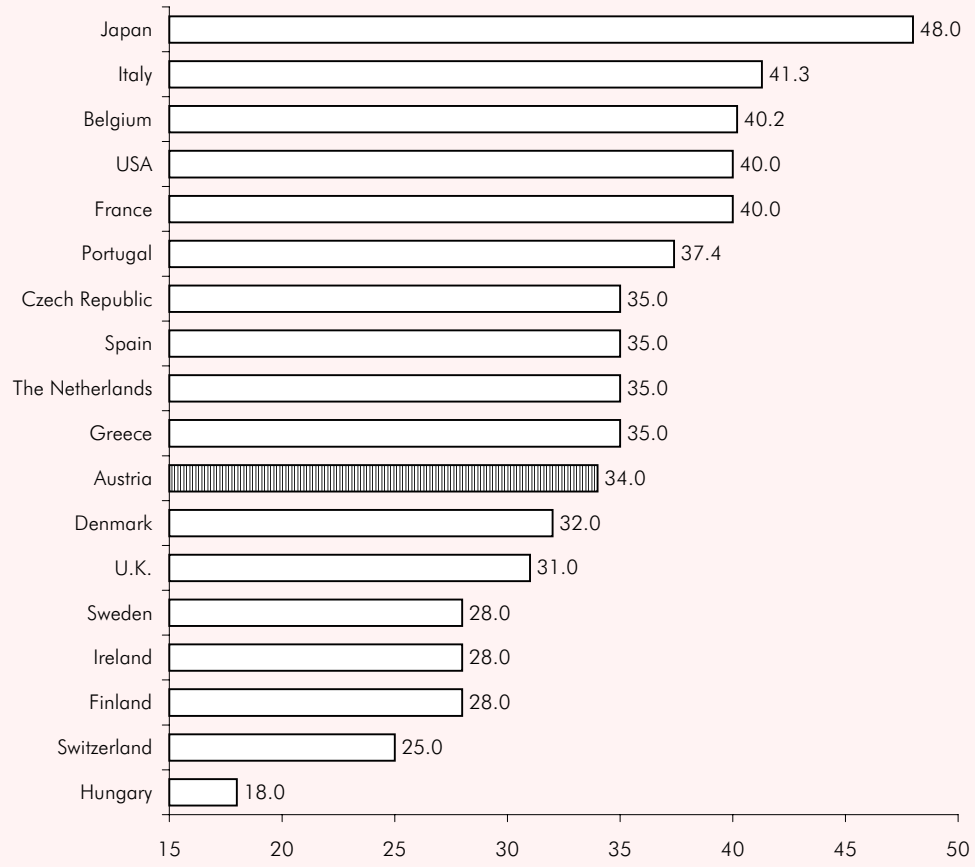
Overall, industrial managers tend to underestimate the locational quality of the Austrian tax system in comparison with internationally competitive tax rates. The greatest potential for improvement lies in striving towards greater consistency of fiscal policy and legislation and also in modifying the tax position of Austrian groups of companies.

Although internal and external location analyses serve fundamentally different purposes, interesting synergies can be derived from their complementarity. *Internal location assessments* are influenced by the company perspective and mostly based on the individual case, hence the results do not easily generalise. *External location assessments* are based on a macroeconomic point of view and provide objectively verifiable results based on quantitative analyses.

**Economic-policy measures aimed at the utilisation of potential synergies**

*Figure 9: Corporate income taxes*

*Tax rates in percent, 1999*




Source: OECD.

The results of structural analyses and analyses of competitiveness provide companies with important basic principles for their internal decision-making processes, whereas internal location assessments serve as an important source of information on quality deficits for the purposes of economic policy (e.g., duration of environmental impact assessments, taxation of groups of companies). Thus, the results of internal location benchmarking, with their special emphasis on subjective concerns, are also of value for scientific analyses and for economic policy as a clearly focused form of "deficit identification" – provided such deficits can be confirmed objectively.

Currently, internal and external location benchmarking are two separate processes implemented in parallel. The aim of economic policy should be to bring these complementary approaches closer to each other. The following measures should be taken into consideration as economic-policy initiatives:

- Within the framework of an *image campaign* aimed at promoting Austria as a business location, the locational qualities of the country should be underlined and brought to the attention of multinational companies.
- The Austrian Competitiveness Report, periodically produced by WIFO throughout the 1990s, should be *continued as a benchmarking indicator set*, possibly to be supplemented by advisory services for enterprises and economic-policy makers. This indicator set could also be used to support the image campaign and provide additional arguments for location marketing to enterprises in search of a suitable location.
- An annual *benchmarking forum* should be established in order to present the results of external location benchmarking for Austria. This would serve as an opportunity for company representatives to present the results of their benchmarking studies and offer suggestions and criticism. Thus, the involvement of the business community in the continuous further development of external location benchmarking could be ensured.

The establishment of a quality circle, aimed at the continuous improvement of the quality of Austria as a business location, would be desirable. The *International Benchmarking Advisory Board*, which has already been set up under the auspices of the Secretary General of the Austrian Economic Chamber, should be maintained and given a broader mandate.

- The solution of *problems at the interface between companies and the public administration* should be entrusted to an *independent ombudsman* not subject to directives and working within the framework of either the Federal Ministry of Economics or the Austrian Economic Chamber. This could be financed in equal parts by the business community and the public sector.

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*Benchmarking of Economic Framework Conditions at Company Level – Summary*

Ongoing work to analyse a country's competitive standing has led to the application of the benchmarking method to comparative sectoral and national assessment. The method involves a comparison in terms of performance which explicitly looks for the "best practice". The use of benchmarking in analysing competitiveness has introduced a new quality to the discussion of locations because it relentlessly measures (individual) location factors of one country against the best practices of competitors (i.e., other countries).

A survey of top-level executives at 11 major companies engaged in multinational activities has shown that benchmarking is used throughout as the method of choice for internal location assessment. Benchmarking of economic framework conditions, on the other hand, is interesting to companies only when they actually refer to the operative level. Intra- and intercompany benchmarking at the operative level is regularly used by all companies within the scope of continuous internal improvement, whereas location benchmarking is performed by just two out of three companies surveyed, and its use restricted to cases of concrete investment decisions.

Internal location assessments yield the subjective view that a company has of a location. They are valuable for economic policy in that they clearly indicate the shortcomings of a location and thus complement external location analyses. Currently, internal and external benchmarking are pursued more or less separately from each other. Economic policy should aim at a closer match between them. Policy initiatives towards this end thus would be:

- an image campaign which should emphasise the qualities offered by Austria as location for business activities;
- continuing the Austrian Competitive Report as a set of benchmark indicators, which could then be used to furnish arguments for the image campaign and to support location marketing with a view to attracting new businesses to locate in Austria;
- an annual benchmarking forum, organised to present the results of external location benchmarking for Austria;
- an independent ombudsman office created for problems that occur at the interface of companies and public administration.