

## **BAK Taxation Index 2007**

### **Effective Tax Burden of Companies and on Highly Qualified Manpower**



|      |        |        |        |        |         |         |         |
|------|--------|--------|--------|--------|---------|---------|---------|
| 2007 | 110.4  | 2.5    | 5961.9 | 5509.9 | 15155.5 | 17788.5 | 18384.9 |
| 2006 | 109.9  | -4.5   | 12.5   | 16.7   | 23.2    | 17.4    | 3.4     |
| 1995 | 1700.5 | 1831.3 | 2120.2 | 7111.0 | 7799.7  | 7161.9  |         |
| 1997 |        | -8.0   | 0.0    | 14.9   | 19.4    | 9.7     | 14.9    |

#### **Executive Summary**

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# Executive Summary

## Aim of the study and method applied

This executive summary presents the BAK Taxation Index 2007, an indicator for the effective tax level of companies and on highly skilled manpower. Taxation of companies constitutes a widely accepted location factor. Companies pay taxes on profits and capital. Also, under competitive labour markets for highly skilled employees, companies have to compensate these highly skilled employees for international differences in labour tax levels. Both elements constitute a tax burden on companies and have an impact on a location's attractiveness for investment decisions.

The research is commissioned by BAK Basel Economics on behalf of the International Benchmarking Programme (IBP) and is carried out by the Centre for European Economic Research (ZEW) in Mannheim. The IBP evaluates and compares economic performance and location factors across European regions and selected "benchmark" regions worldwide. The BAK Taxation Index represents the headline figures of the IBP's Taxation Module. It is regularly updated and illustrates trends in the effective tax levels of companies and on highly skilled manpower.

Beside 14 Swiss cantons, the study covers regions in 18 EU Member States and Norway. Outside Europe, several locations in the US and – for the first time – in Asia are considered. Especially as what concerns Switzerland, inter-cantonal differences in taxation systems are taken into account. Also, effective tax levels within a canton differ since municipalities set the multipliers (Steuerfüsse) of the state taxes. This report, however, considers effective tax levels applicable in the capital of a canton (Kantonshauptstadt). Within the executive summary and regarding other countries, the focus is on the most important region or the region obtaining the median in effective tax levels. Within the comprehensive report of the research project, we take up a more regional point of view and take into account inter-regional differences for other countries as well.

The scope of the study is as follows:

- First, due to a great number of relevant tax rules, effective tax burdens may differ significantly from statutory tax burdens. Therefore, the analysis quantifies meaningful estimates of effective tax burdens. These estimates take into account the most important rules of all the relevant taxes. For company taxation, these include the corporation tax with surcharges, other profit related taxes, real estate taxes, and specific taxes based on capital. For the taxation of highly skilled manpower, the study considers income taxes including surcharges, tax-like social security contributions as well as wage taxes paid by the company.
- Second, an effective tax rate is always the result of the underlying assumptions. To identify the general context, and to find out the most relevant tax provisions in different economic constellations, the so-called tax drivers, the study examines the effect of important tax provisions on effective tax burdens.
- Third, taxation is deemed to be an important location factor. In order to compare the attractiveness of different locations from a tax perspective, the study compares effective tax burdens inter-regionally and internationally. Furthermore we show the impact of both measures on regional productivity growth.

## Company Taxation

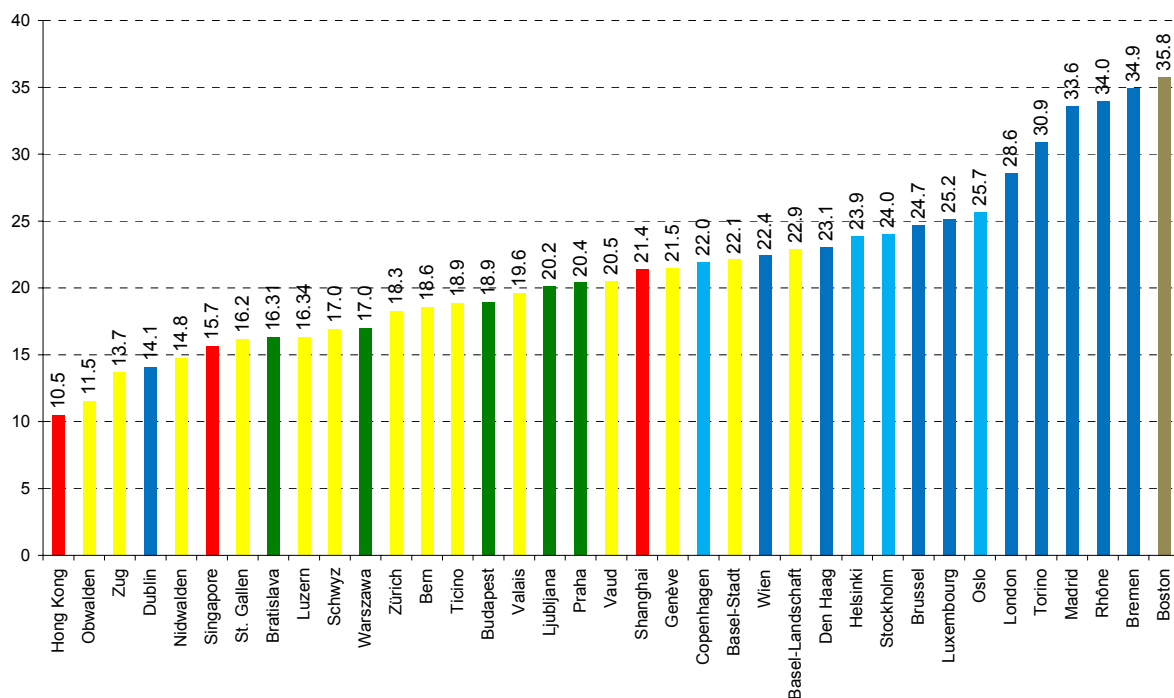
The determination of the effective tax burden of companies bases on the common approach introduced by Devereux and Griffith. We measure the effective tax burden of a profitable investment that yields a standardized pre-tax rate on investment of 20%. We assume a corporation in the manufactur-

ing sector, which undertakes a particular mix of investments and uses a particular combination of sources of finance. The types of investment considered are intangibles, industrial buildings, machinery, financial assets, and inventories. The sources of finance are new equity capital, retained earnings, and debt.

The tax rates computed for each region comprise taxes levied at the national, the state, and the municipal level. The study focuses on the effective tax burden at the corporate level, which is especially relevant for the choice of a location of international corporations. Therefore, taxes on corporate income and capital are included. Beside the statutory tax rates of these taxes we also take into account interactions of different kinds of taxes and the most important rules for the definition of the tax base, e.g. differences in depreciation allowances and inventory valuation.

The BAK Taxation Index 2007 on companies shows a remarkable dispersion of effective average tax rates in the considered locations. The respective values range from 10.5% in Hong Kong to a maximum of 35.8% in Boston as indicated in Figure 1. The city of Munich obtains the last rank of the overall BAK Taxation Index 2007, having an effective average tax rate of 36.0%. It is, however, not contained in the figure as for Germany the median region is presented in this executive summary. A rough geographical classification of the assessed locations helps in concisely presenting the main findings of this year's study.

**Figure 1: BAK Taxation Index 2007 for companies – EATR (%)**



Note: In Switzerland, the tax burden has been calculated for the capital of the Canton (Kantonshauptort).

Source: ZEW/BAK.

The **Swiss cantons** still display low EATRs. Their top positions in the ranking are due to a relatively narrow tax base and comparatively low combined statutory profit tax rates. Said argument especially holds for the cantons of Obwalden, Zug, Nidwalden, Luzern and St. Gallen. Among the assessed Swiss cantons, Basel-Landschaft and Basel-Stadt still levy the highest combined statutory profit taxes as well as comparatively high capital taxes. Accordingly, they therefore show the highest EATRs and EMTRs of the assessed cantons. However, in an international comparison, all analysed Swiss cantons perform rather well with low or at least very moderate levels of effective company tax burdens.

The considered **Eastern European countries** show up among the formation of Swiss cantons on top of the ranking. In particular Slovakia and Poland occupy favourable positions that are already close to the Swiss cantons which dispose of the lowest EATRs. This is mainly due to the fact that both Slovakia and Poland disclose low statutory profit tax rates. Hungary, Slovenia and the Czech Republic remain behind.

Within the cluster of **Scandinavian countries**, Denmark shows the lowest effective average tax burden on companies. This is particularly due to the lowest statutory profit tax rate among these countries. As regards the EATR, the respective levels of Finland and Sweden are very close to one another. Obviously, companies in Finland cannot fully benefit from the relatively low statutory profit taxation because the advantage is partially neutralized by less attractive depreciation rules compared to Denmark and Sweden. In any case, Norway is slightly left behind. On the one hand, it does not cap the other Scandinavian countries as regards statutory profit taxation and on the other hand, it disposes of a relatively unfavourable depreciation regime, compared to its Scandinavian neighbours.

Turning to the **Continental European countries (including Ireland and the United Kingdom)** only Ireland and the Austrian states show EATRs below average. Especially Ireland is in a very favourable position and shows up directly behind the two top Swiss cantons of Obwalden and Zug. While the lowest statutory profit tax rate among all considered locations is the main cause for the low Irish EATR, the Irish tax base itself is relatively broad and thus does not belong to Ireland's main qualities as regards taxation. Other locations dispose of more generous rules concerning this aspect. As to Luxembourg, its relative position would even further improve, if the increased investment tax credit available under certain conditions was taken into consideration. When approaching the bottom of the ranking, one observes almost exclusively Italian, French and German locations as well as the Spanish capital Madrid. All these locations display high combined statutory profit tax rates, although in some cases a movement towards lower profit tax burdens has begun or is to be expected. The position of France is especially influenced by a high level of non-profit taxes (trade tax and real estate tax) on industrial buildings and machinery which also accounts for the highest EMTRs among all considered locations.

Boston as the only **North American** location in the BAK Taxation Index 2007 shows the second highest average tax burden on companies of all assessed locations. Its EATR amounts to 35.8%. The combined statutory profit tax rate of 38.7%, which is still comparably high, plays a central role in explaining these findings.

With regard to the assessed **Asian** locations, Hong Kong clearly stands out as it leads the BAK Taxation Index 2007 with an EATR of 10.5%. Furthermore, the effective tax burden levied on companies' marginal investments is zero. First of all, this result is due to a rather low statutory profit tax rate and the fact that interest income derived from deposits with authorised institutions is even exempt from tax. Turning to Singapore, again the low level of statutory profit taxation is mainly responsible for the favourable EATR result. The two considered Chinese locations Beijing and Shanghai rank on the 20<sup>th</sup> place of the BAK Taxation Index. The underlying statutory corporate income tax rate of 24% levied on Foreign Investment Companies in China is moderate in an international comparison, but it is not very low.

In addition to an international comparison of effective tax burdens, this study is designated to reveal local variations of tax burdens and local trends of fiscal policy. This is of particular concern in the case of Switzerland. The Swiss cantons dispose of high autonomy as concerns tax policy. Thus, the federal structure of the Swiss tax system automatically leads to a high level of **inter-regional variation**. The lowest EATR among the assessed Swiss cantons can be found in Obwalden with a percentage value of 11.5%. Basel-Landschaft meanwhile reaches the intra-Swiss maximum with an EATR of 22.9%.

More moderate inter-regional differences exist in Germany and France. In Germany, these local variations of tax rates are due to the municipalities' right to choose the multipliers for trade and real estate

taxes. In France, the municipalities are free to determine the trade tax and the real estate tax. In Austria, Italy and the Netherlands, inter-regional variation is of minor importance or even totally absent because regional or local governments either have no power to determine important corporate taxes or do not make use of it.

In addition to the BAK Taxation Index presented in the form of an inter-country and inter-regional EATR ranking, a second set of results is expressed by the effective marginal tax rates. The dispersion of the EMTRs is as great as the one already observed in case of the EATR. It ranges from -5.1% in Brussels to a maximum level of 33.6% in the French regions of Doubs and Bas-Rhin. The EMTR is less relevant for international location decisions, but it provides some valuable information about the optimal scale of investment after the location decision itself has already been taken. In more technical terms, an EMTR indicates the effective tax burden on an investment that is marginal in an economic sense, i.e. an investment that earns a net present value of zero and thus displays the frontier of profitable investment opportunities of a company. The lower the EMTR at the corporate level the larger the theoretically optimal level of investment. Due to the assumption of a marginal investment underlying the computation of the EMTR, non-profit taxes and regulations concerning the taxable base have a strong impact on its precise value. For the EATR, the computation of which is based on the assumption of a profitable investment non-income taxes in contrast play a minor role.

As concerns the EMTR results for the assessed locations, the **Swiss cantons** here again confirm their top position in the international ranking. This is in first place due to a relatively narrow tax base, but the low statutory profit taxation in Switzerland still plays a role, as well. With respect to the considered **Eastern European countries** Slovakia, Poland and also the Czech Republic range close to the Swiss cantons while Slovenia and Hungary again remain behind. In the intra-**Scandinavian** comparison, Finland and Norway present significantly higher EMTRs as compared to their Scandinavian neighbours although they levy corporate income taxes at comparable rates. This clearly hints at a less attractive determination of the tax base in these two countries. Among the **Continental European countries** France clearly stands out as French locations such as Rhône present the highest EMTR of all assessed locations. This is particularly due to the fact that in addition to relatively high statutory profit taxation the French corporate tax system is especially influenced by a high level of non-profit taxes (trade tax and real estate tax) on industrial buildings and machinery. As regards the newly assessed **Asian locations**, Hong Kong holds the top position also with respect to the EMTR due to very favourable depreciation rules.

A third set of results includes taxes arising at the **shareholder level**. The non-consideration of shareholder taxation is justifiable or even indicated if managers do not know the tax position of their marginal shareholder. Thus, the calculations at the corporate level reflect the relevant effective tax burden at the decision-level on investments. Moreover, domestic shareholder taxation does not affect corporate investment decisions of multinationals under substantial international capital mobility. As a consequence, the inclusion of the shareholder-taxation is more relevant if one considers small and medium sized enterprises. To be precise, when dealing with shareholder taxation we assume that corporations are owned by domestic shareholders who reside in the same location as the companies.

In 2007, companies in Brussels and St. Gallen have the lowest cost of capital among the assessed locations. The cost of capital is the minimum pre-tax rate of return the investment has to generate. The highest cost of capital must be earned by companies in Den Haag and Rhône. Swiss cantons all show costs of capital below the real market interest rate. Furthermore, it is worth looking at some locations which have recorded a considerable change in their average cost of capital across all shareholders and all sources of finance from 2005 to 2007. These locations are Ljubljana, Luxembourg, Oslo and Budapest. Turning to Brussels, a sharp decline in the cost of capital is found due the introduction of the notional interest deduction for corporate equity at the company level, which generalizes the favourable conditions of allowable financing costs to all ways of financing. As regards Ljubljana, the replacement of the progressive taxation of capital income by moderate final withholding taxes implies

a massive reduction of all respective maximum tax rates in Slovenia. Particularly the dominating effect of reduced interest taxation has thus led to a sharp rise of the cost of capital across all types of shareholders. The introduction of a very moderate final lump-sum withholding tax on individual interest income, paid by resident entities in Luxembourg, has led to a significant increase in the average cost of capital in this location. Oslo as well has recorded increasing cost of capital across all types of shareholders throughout the last years. This is particularly due to the rise in effective wealth taxation. In Budapest, the introduction of the solidarity surcharge is responsible for the increase of cost of capital at the overall level. Among the newly considered Asian locations, Shanghai shows the highest average cost of capital across all types of shareholders.

### **Taxation of highly skilled manpower**

The tax burden on highly skilled manpower is measured by means of a simulation model developed at the ZEW. The model allows considering several components of the remuneration package, the family status, and varying levels of compensation. This concept parallels established methodologies for the quantification of company tax burdens by calculating the effective average tax rate (EATR) as an indicator of the tax burden. The basic idea of our approach is that employers compete for highly qualified employees and therefore have to compensate these for taxes on labour income and tax-like social security contributions. As a consequence, the tax burden of different regions is compared for a given *disposable income* after taxes which the employee can obtain at all locations.

The model determines the tax burden in two steps. At first the tax assessment of a typical qualified employee's income before taxes (the *employment costs*) is conducted. If the resulting income after taxes falls short of (exceeds) the required disposable income, in a second step the assessment is repeated for higher (lower) employment costs. The model then iterates until the employment costs necessary to obtain the predetermined disposable income is found. The effective average tax rate (EATR) is calculated by dividing the difference between employment costs and disposable income (the *tax wedge*) by the employment costs. The EATR thus expresses how much the employer has to expend in addition to the predetermined disposable income. For example, if an employee with a disposable income of € 100,000 faces an EATR of 25% this means that the tax wedge (€ 33,333) amounts to a quarter of the employment costs (€ 133,333).

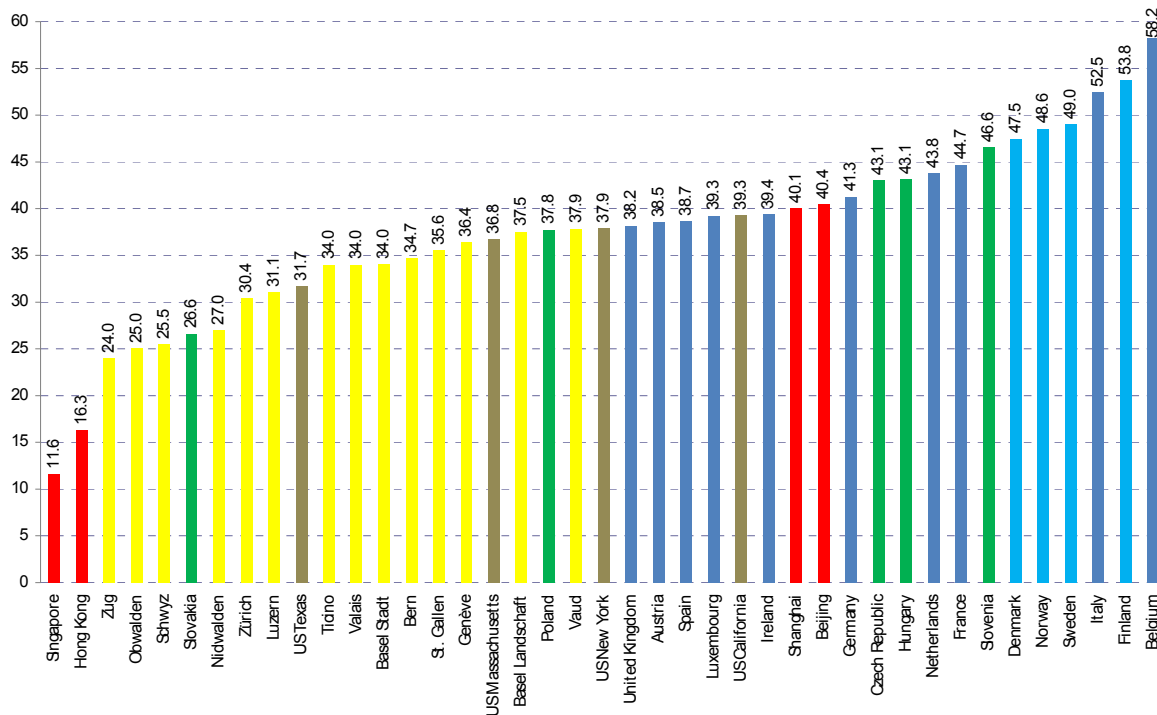
Taxes in this context are all income taxes including surcharges and state and municipality taxes, as well as payroll taxes paid by the company. Social security contributions are part of the tax burden inasmuch as the employee does not earn a specific, individual benefit by paying them. According to the basic idea of competition, there is little risk of unemployment for the kind of qualified employees considered here. Hence contributions to unemployment insurance, and by a similar reasoning also contributions to accident insurance, are defined as taxes. Health premiums, on the other hand, are not considered to be taxes since they are deemed to provide a genuine insurance.

Contributions to public pension schemes are considered to be partly taxes. The first pillar of old-age insurance is usually organised as a pay as you go system involving redistribution between generations and between high and low earning workers. Inasmuch as contribution payments do not result in actuarially fair pension entitlements, they constitute an implicit tax rather than an insurance premium. To account for this implicit tax, entitlements earned by the highly qualified employee are computed according to the legislation currently in force and offset against contributions.

In this study, we distinguish between three kinds of compensation: (1) cash compensation, (2) contributions to old-age provisions, and (3) benefits in kind. These components are taxable in different periods. Cash compensation and benefits in kind are taxable income in the year of payment. Contributions to old-age provisions are either excluded from taxable income and thus pension benefits are subject to taxation, or contributions are paid out of taxed income implying that pensions are non-taxable income during retirement. Our model explicitly deals with the timing of tax and pension payments by using an inter-temporal approach.

The BAK Taxation Index on highly qualified manpower represents the effective tax level for employing a single highly skilled person, earning EUR 100,000 after taxes and charges. As can be seen from Figure 2, the BAK Taxation Index 2007 shows a similar picture as in 2005. It, however, increased geographically by four regions in Asia. Tax levels mostly decreased little compared to the BAK Taxation Index 2005. The total span of effective tax rates amounts to more than 46 percentage-points between the location with the lowest and with the highest employment costs. The effective tax levels are between 11.6% for employment in Singapore and 58.2% in Belgium. With the expansion to Asia, the spectrum of tax levels thus increased again. Compared to company taxation, differences between locations are considerably higher.

**Figure 2: BAK Taxation Index 2007 on highly qualified manpower, in %**



Note: In Switzerland, the tax burden has been calculated for the capital of the Canton (Kantonshauptort).

Source: ZEW/BAK.

- The Swiss cantons marked in yellow in Figure 2 still dominate the top of the ranking, albeit there are now two outlier from Asia that occupy the first two positions. Within the inter-Swiss ranking, there were no substantial changes. Employment costs in most cantons fell slightly, but most of them held their positions in the ranking. Zug and Obwalden as well as Schwyz and Nidwalden are on top of the ranking. Vaud taxes the employment of highly skilled persons the highest. From 2005 to 2007, Ticino und Valais changed places. Basel-Landschaft fell back on the last but one inner-Swiss position. A reform of the tax table let Obwalden gain one inner-Swiss rank.
- The US locations, which are coloured brown in Figure 2, display a range between the low-tax state Texas (31.7%) that competes with the moderately taxing Swiss cantons and the other three states Massachusetts, New York, and California that show up with tax levels between 35% and 40% and compete with high-tax Swiss cantons and low-tax central European countries.
- Eastern European countries are widespread within the ranking (marked in green). Slovakia has a generous effective tax level of 26.6% and is on sixth rank. Only Singapore and Hong Kong and the Swiss cantons Zug and Schwyz tax highly skilled manpower lower. Poland (37.8%) shows a mod-

erate to low tax rate, comparable to the last Swiss canton Vaud, Massachusetts and New York. The employment of the highly skilled is more expensive in the Czech Republic, Hungary, and Slovenia with tax levels between 43% and 47%. These tax levels are higher than or equal high as in most other central European countries but lower than in Scandinavia.

- The Scandinavian countries Denmark, Norway, Sweden, and Finland are located at the back positions of the BAK Taxation Index (see light-blue pillars). They display effective tax levels of 47.5% and higher. Within Scandinavia, highly skilled labour is the most expensive in Finland with 53.8%. However, there are now two “rivals” with Italy and Belgium - obviously competing for the last rank.
- 6 out of 10 of the remaining “continental” countries and Ireland and the UK (marked in dark blue) tax the employment of highly qualified labour more or less similarly with effective tax levels between 38.2% and 39.4%. Employment in the Netherlands (43.8%) and France (44.7%) is slightly more expensive. Considerably higher tax levels can be found in Italy and in Belgium. Italy is on the last but two position with 52.5%. Belgium by far displays the highest effective tax level with 58.2%.
- The new Asian locations marked in red show favourable tax levels for two cities. Singapore and Hong Kong rank first with a considerable margin to the following Swiss cantons. Singapore has the lowest effective tax level with 11.6%, followed by Hong Kong with 16.3%. A single employee without children requiring a disposable income of EUR 100,000 costs less than EUR 120,000 in Hong Kong and Singapore and about EUR 147,000 in Beijing and Shanghai. Shanghai and Beijing, the two locations completely under Chinese tax law but differing according to social security, show tax levels comparable to those of most bigger European countries. The tax levels amount to 40.1% and 40.4% in Shanghai and Beijing, respectively.

The low effective tax levels are driven by low income tax rates on the one hand and low charges out of social security on the other hand. The top tax rates in Singapore and Hong Kong amount to 17% and 20%. These tax levels are far below most European or US levels. They even outdo the 19% flat rate in Slovakia since these income tax schedules are progressive. The Chinese income tax rate is on a moderate level. The other important tax driver is the social security system. Hong Kong and Singapore operate fully funded systems – with almost no redistribution. While in most European countries, there is a comparably high amount of implicit taxes within the public pension scheme, these two locations only regulate the obligation to spend for old-age provision but do not regulate the kind of old-age provision or health insurance. In contrast, social security and other charges payable by the employer play an important role in Beijing and Shanghai. Especially the obligatory contributions to welfare and education programmes of 17.5% without maximum ceiling weigh on the effective tax levels.

The effective tax rates are driven by several aspects of income taxes and social security. Firstly, the most important tax drivers are the tax tables of the personal income tax, especially the top tax rate. Secondly beside the tax rates, the tax base also has an impact on the effective tax burden. The taxation or deductibility of certain income components, e.g. contributions to the social insurance or occupational pension plans or the taxation of public pensions or annuities from occupational pension plans is of high relevance. Thirdly, contributions to social insurance qualifying as charges raise the effective tax burden. The impact strongly depends on the amount of contribution rates and the existence or non-existence of ceilings that cap the contributions for high incomes.

Families receive special allowances via the tax system or social security at almost all locations. The effective tax levels amount to between 11.1% in Singapore and 53.5% in Belgium if one considers a married highly skilled employee with two children. The first and the last rank thus are the same as for single employees; however, the tax levels are lower.

The Swiss cantons again dominate the top of the ranking, but Singapore and Hong Kong nevertheless are on the first two positions. There are only few changes in the Swiss ranking due to differing personal allowances and tax tables in the state income tax. Also the United States show substantially

lower effective tax levels for families. Within the continental countries, Luxembourg, Germany, and France gain ranks due to their family taxation. Eastern European and Scandinavian countries do not have such differences in the taxation of singles and families. The effective tax rates only decrease little and the countries remain on the same rank or even lose ranks. China loses ranks as there are no allowances or benefits for children and married couples.

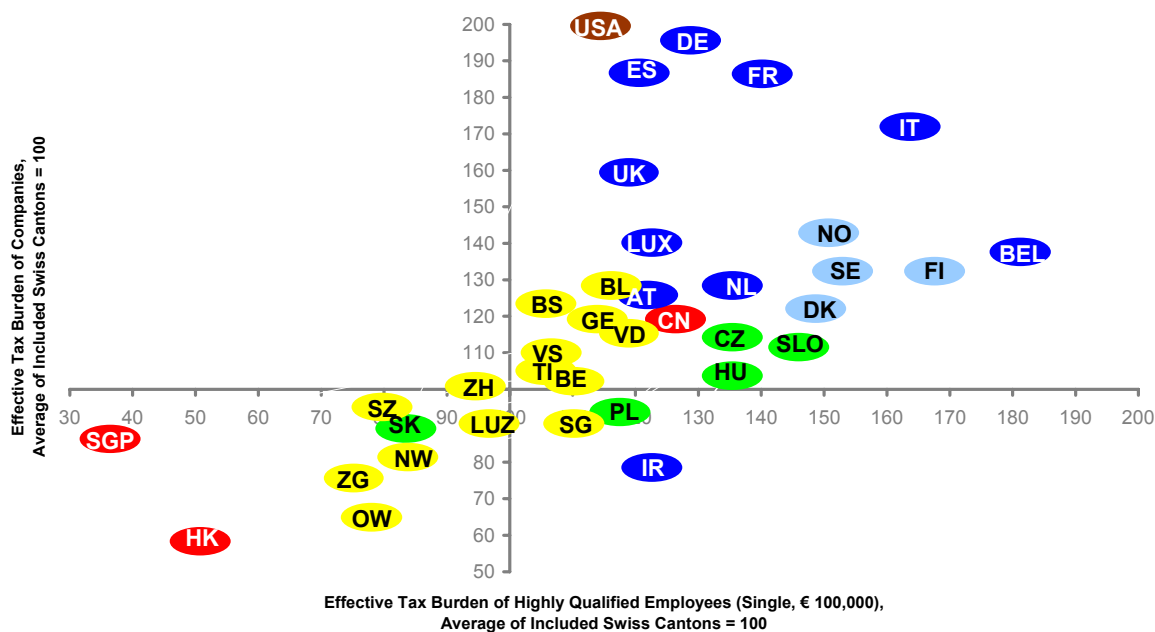
Due to progressive tax tables, income ceilings of social security and tax allowances, effective tax levels highly depend on the specific earnings level under consideration. In order to allow for these aspects, tax levels for a low (EUR 50,000) and a high level of disposable income (EUR 200,000) are calculated in addition. With increasing income those countries with low top income brackets of the personal income tax gain ranks. Switzerland and the United States therefore lose ranks. With increasing income the tax burden increases substantially. For the high income level, also Poland, Austria, Spain, Luxembourg, Germany, Hungary, the Czech Republic, the United Kingdom, and Ireland directly compete with Switzerland and the United States. Singapore and Hong Kong, however, hold their positions on top of the ranking.

### **Synthesis of both indicators**

The effective average tax rates for companies and on highly skilled manpower (single employee, earning EUR 100,000 disposable income) constitute the BAK Taxation Index. The methodologies used to determine the effective tax levels, however, differ and the figures of BAK Taxation Index cannot be compared directly. But it is possible to compare the ranking and the relative differences of both indicators. Figure 3 presents a synthesis of the two headline figures. We indexed the effective tax levels of all countries and the Swiss cantons relative to the average of all included Swiss cantons. The vertical/horizontal distance between an observation and the axes shows how much lower/higher this location's effective tax level is compared to the average of the Swiss cantons for companies (vertical axis) and for highly skilled manpower (horizontal axis).

The figure shows that the Swiss cantons clearly dominate in terms of low tax levels for both, companies and highly skilled manpower. However, there are 5 non-Swiss locations imposing lower effective average tax burdens on companies as compared to the Swiss average. Poland and Ireland tax companies at effective rates below the Swiss average, but both levy higher effective tax rates on highly skilled manpower. The Irish effective tax rate on highly qualified manpower even exceeds that of all Swiss cantons. Poland competes directly with Vaud, Basel-Landschaft, Genève, and St. Gallen as concerns taxation of highly qualified employees. Slovakia and the newly considered locations Singapore and Hong Kong are below the Swiss average with respect to both indicators. Slovakia shows comparable tax levels as the low-tax cantons. Singapore has by far lower tax levels on highly skilled manpower, but taxes companies higher than Obwalden, Zug and Nidwalden. Hong Kong displays lower levels than all Swiss cantons for both indicators.

**Figure 3: Correlation of the two indicators representing the BAK Taxation Index on companies and highly skilled manpower (2007)**



*Note:* In Switzerland, the tax burden has been calculated for the capital of the Canton (Kantonshauptort).  
 BE: Bern, BL: Basel-Landschaft, BS: Basel-Stadt, GE: Genève, LUZ: Luzern, NW: Nidwalden, OW: Obwalden, SG: St. Gallen, SZ: Schwyz, TI: Ticino, VD: Vaud, VS: Valais, ZG: Zug, ZH: Zürich.  
 CZ: Czech Republic, HU: Hungary, PL: Poland, SK: Slovakia, SLO: Slovenia.  
 DK: Denmark, FI: Finland, NO: Norway, SE: Sweden.  
 AT: Austria, BEL: Belgium, DE: Germany, ES: Spain, FR: France, IR: Ireland, IT: Italy, LUX: Luxembourg, NL: Netherlands, UK: United Kingdom.  
 USA: USA (Massachusetts).  
 CN: China, HK: Hong Kong, SGP: Singapore.

*Source:* ZEW/BAK.

Compared to the BAK Taxation Index 2005, the overall picture is similar, but some locations moved horizontally and/or vertically. Altogether, the following conclusions can be drawn with regard to the regions under consideration:

- The Swiss cantons (marked in yellow) hold top positions for both indicators. In tendency, the effective tax levels remained stable or decreased slightly as concerns companies and highly skilled manpower. The company tax reforms in Obwalden and St. Gallen lead to considerable declines in tax levels. Due to tax reductions on the federal level, most of the cantons' effective tax levels on qualified manpower declined from 2005 to 2007. Basel-Landschaft is the only canton that has a considerable increase of the tax level caused by a new tax table which favours families and taxpayers with lower incomes but burdens single top earners.
- The new Asian locations (marked in red) show a twofold picture. Singapore and Hong Kong tax companies and highly skilled manpower on a very low level. China, in contrast, displays moderate tax levels comparable to low-taxing continental European countries. One might conclude that this finding corresponds to the observation, which is also applicable in Europe: Smaller countries and locations, such as Hong Kong and Singapore, can compete over taxes whereas larger countries cannot.
- Eastern Europe (marked in green) seems to be achieving an end of the hard tax competition of the last years. With regard to company taxation, Slovenia and the Czech Republic have a decline in effective tax rates. The two only locations of the whole sample that increased their

company tax level from 2005 to 2007 are in Eastern Europe: Hungary and Poland. Also with regard to highly skilled manpower, there was an increase in the tax level in three locations. Poland and Slovakia, however, significantly reduced the taxes on highly qualified personnel.

- Scandinavian countries (marked in light blue) show decreasing tax levels. Especially, the Danish effective average tax rates on companies fall. At the same time, all countries reveal a decline of tax levels on qualified manpower. Albeit the Scandinavian countries still tax companies on a low level and qualified manpower on a high level, one cannot conclude any more that they have the highest tax rates within the sample as they decreased to a higher extent than in most other locations.
- There is little dynamic for some continental European countries and Ireland and United Kingdom (marked in dark blue). Most countries remained more or less on the same tax level. Belgium, the Netherlands, and Spain undertook company tax reforms that resulted in a reduction of effective tax levels. France and again Spain reformed their personal taxation. Spain, therefore, shows a decrease of the BAK Taxation Index. In France, however, winners of the reform are employees with very high earnings. The employment considered in the BAK Taxation Index is taxed higher due to tax base broadenings. Also in Italy, there was a sharp increase of the tax level as the reforms which were introduced in 2005 are revoked partly.
- Comparable to most continental European countries, the United States did not have substantial changes. They still tax companies on a high level and highly skilled manpower on a rather low or moderate level.

Having in mind upcoming larger company tax reforms in Germany and the Czech Republic, substantial tax rate cuts in Italy and the high dynamic of Swiss cantons one should expect ongoing movements in the ranking of corporate effective tax levels within the next future. Also with respect to the taxation of highly skilled manpower, the picture might change. Increasing funding gaps within social security systems and income tax reforms with positive and negative effects for the tax payers will bring some variation into the ranking.