

## Disposable income 2016

December 2016

Swiss Issues Regions

# Housing, Commuting, Child-care: Where's the Least Expensive Place to Live?



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**Uri defends its top spot**

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## Management Summary

**Living costs are not the same across Switzerland. Swiss households can optimize their budgets by moving to a different location – not necessarily far away. In this study we present the updated calculation of the RDI indicator, which measures freely disposable income – the money available to a household for free consumption after the deduction of mandatory charges and fixed costs.**

### Choice of residential location: the financial view

There are many factors to be considered when choosing the “right” place to live. Besides the area and its infrastructure, the availability of appropriate housing, emotional criteria and personal networks, for example, financial factors also play a key role. When assessing the financial characteristics that make a particular town an attractive place to live – what we call the “financial residential attractiveness” – the tax burden is just one factor. Other mandatory charges, such as health insurance premiums, family allowances and the mechanism for calculating imputed rental values for homeowners should also be included in the analysis. Moreover, fixed costs tied to a particular location, such as rents, real estate prices and commuting expenses, must also be considered.

### New: inclusion of costs for external childcare

The analysis of the financial residential attractiveness of Swiss municipalities and cantons was first conducted in 2006, and updated in 2008 and 2011. Our calculation now also includes the cost of external childcare, since these expenses can have a major impact on a family’s budget. Furthermore, there are significant regional differences in the allowable tax deductions and childcare costs.

### Cantonal ranking: Uri defends its top spot

As in our last survey, the cost of living for the average household is least expensive in Canton Uri, followed by Glarus. With low housing costs and an attractively low level of taxes and other charges, these two cantons are most appealing from a financial viewpoint. They are followed in the ranking by other rural cantons such as Obwalden, Thurgau and Appenzell-Innerrhoden. The mid-field comprises a number of variously positioned cantons with rural or suburban features.

### Pricey cities: high housing costs and above-average mandatory charges

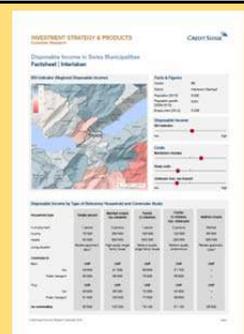
At the other end of the scale are the urban cantons Geneva and Basel-Stadt, where high housing costs and mandatory charges make life expensive. The financial residential attractiveness of Cantons Vaud, Zurich, Basel-Landschaft and Neuchâtel is similarly below the average. Agglomerations in Thurgau, Schaffhausen, Schwyz, Solothurn, Lucerne and Aargau are particularly attractive to households that require a large living space, but seek to avoid a long commute to work. The aggregation at cantonal level blurs the differences in financial residential attractiveness between individual municipalities. The detailed analysis at municipal and urban neighborhood level highlights the differences in financial residential attractiveness within one canton.

### RDI Factsheets for all Swiss Municipalities and for Key Urban Neighborhoods

Regional comparison of freely disposable income

Since depicting all results for all Swiss municipalities exceeds the scope of this study, we have prepared factsheets for all municipalities as well as for the urban neighborhoods of Basel, Bern, Geneva, Lausanne and Zurich. Each factsheet compares the municipality's financial residential attractiveness with major adjacent municipalities, and provides information on commuting costs and childcare.

A sample factsheet for the municipality of Interlaken (BE) is shown in the appendix on page 27.



**We would be happy to provide you with the factsheet of your residential location or any reference municipality. Please contact your relationship manager at Credit Suisse.**

## Concept and Methodology

# What's Left After Subtracting All Mandatory Charges and Fixed Costs?

**Freely disposable income is the amount that remains to a household for free consumption after the deduction of mandatory charges and fixed costs. Besides the well-known differences in tax rates, there are also regional differences in, for example, real estate prices, health insurance premiums and family allowances.**

**How much money is left at the end of the month for consumption?**

The financial residential attractiveness of an area depends on a number of regionally different factors related to income and expenditure. In addition to mandatory charges imposed at federal, cantonal and municipal level, many other budget items are relevant. In order to determine the freely disposable income, we consider a household's fixed costs: mandatory and long-term essential expenditure as well as costs for commuting and childcare (colored blue in the chart below). Spending based on short-term consumption decisions is not included, however, since it has no bearing on the decision where to live and is not binding.

**Analysis of all location-dependent spending**

Discretionary household spending can be divided into different categories, depending on its necessity and the timing of the required payments. For example, having a home is a basic need, but the decision to buy or rent is basically discretionary. Moreover, this decision has a long-term characteristic, since reversing it involves significant transaction costs. Housing costs and directly associated expenditure can thus be considered fixed costs for a household.

### Expenditures of Private Households

| Statutory Obligation   | Discretionary Expenditure  |   |
|--|--|---|
|  | Essential expenditure  | Discretionary consumption decision                                    |
| - Income tax<br>- Wealth tax<br>- Social insurance contributions<br>- Mandatory health insurance | <b>Short-term commitment</b><br>- Cost of food<br>- Spending on clothing   | - Various consumer spending<br>- Spending on entertainment            |
|  | <b>Long-term commitment</b><br>- Housing costs<br>- Spending determined by place of residence (ancillary costs, charges) | - Other insurance<br>- Media and telecommunications subscriptions     |
|  | <b>Mobility</b><br>- Commuting costs (travel passes, kilometer costs)  | - Supplementary mobility costs (e.g. leisure and shopping trips)      |
|  | <b>Childcare</b><br>- Cost of external childcare required due to employment  | - Additional childcare costs (e.g. babysitter for leisure activities) |

**Three quarters of gross income stems from employment, 20% from transfer payments**

The budget of an average household covers a variety of income sources and expenditure items. The bulk of the average Swiss household's gross income, around 75.6%, is earned income. Investment and rental income accounts for 4.3% of gross income, while transfer income – mainly from social insurance payments and pensions – makes up the remaining 20.1%.

**Disposable income = gross income less mandatory charges**

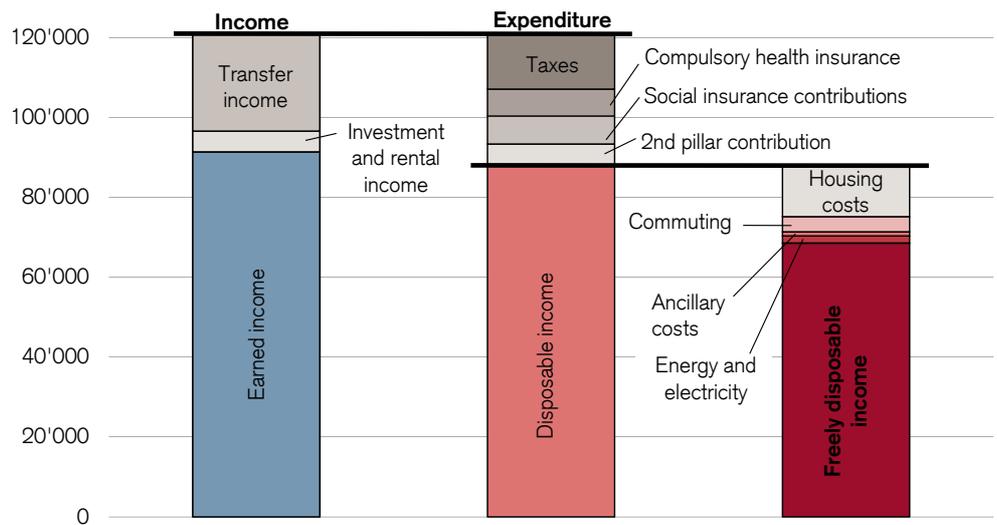
On the expenditure side, 27.1% of gross income goes in mandatory charges, thereof 11.4% – almost half – on income and wealth taxes. Contributions to social insurance and occupational pension funds (2nd pillar) together with premiums for compulsory health insurance account for another 15.7% of gross income. Disposable income denotes the sum available to households after the deduction of mandatory charges. This figure amounted to CHF 88'113 in 2014.

**Freely disposable income = disposable income less fixed costs**

Fixed costs account for 16.2% of gross income, and can be divided into housing costs (10.7%), ancillary costs (0.8%), electricity and energy costs (1.5%) and commuting costs (3.1%). Deducting fixed costs leaves the average Swiss household with a freely disposable income of CHF 68'555 (56.7% of gross income) for further consumption and saving.

### Budget for the average Swiss household in 2014

In CHF per year; average household size: 2.2 persons



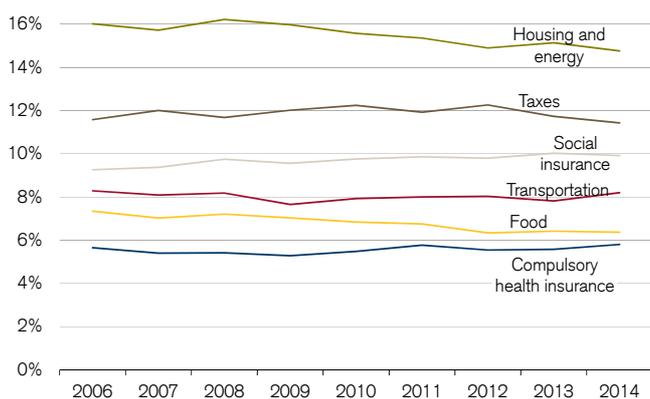
Source: Swiss Federal Statistical Office, Credit Suisse

### Household income and expenditure vary widely from one household to another

Depending on earned income, assets, household characteristics and living conditions, income and expenditure can be significantly different – data on the average Swiss household alone is of limited value. Transfer income, for example, typically makes up a substantially larger portion of income for pensioners than for employed persons, who receive little if any social benefits. The composition of the expenditure side is similarly varied. The average household spent nearly 6% of its gross income on mandatory health insurance premiums between 2006 and 2014 (see chart below left). However, since premiums are fixed regardless of income, they are a significantly greater burden for lower-income groups (see chart below right). The picture is similar for housing costs, which swallow up more than 30% of gross income for the lowest quintile, about three times more than for those with the highest incomes.

### Trends in Household Expenditure

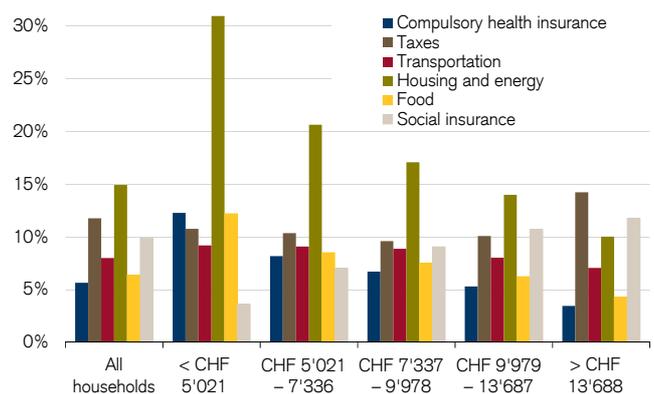
Average share of gross income for various spending categories



Source: SFSO, Credit Suisse

### Lower Income Groups Pay Significantly Higher Shares for Housing and Health Insurance

Average share of monthly gross income for various spending categories by income class; 2012–2014



Source: SFSO, Credit Suisse

### Analysis of the disposable income for various sample households across Switzerland

The aim of this publication is to analyze the regional differences in disposable income on the basis of various sample households. In this way we can include numerous household-specific characteristics as well as regionally diverse spending structures. The following table shows the household characteristics that are taken into account, which in combination yield around 160'000 case types.

## Case Types for the Analysis of Disposable Income

| Characteristic     | Number of types | Specification  |
|--------------------|-----------------|--|
| Household type     | 4               | Single person      Married with no children      Married with 2 children      Retired couple   |
| Housing types      | 7               | Rented apartment 60 m <sup>2</sup> Rented apartment 100 m <sup>2</sup> Rented apartment 150 m <sup>2</sup>                                 |
|                    |                 | Fitted out to a medium standard      Fitted out to a medium standard      Fitted out to a medium standard                                  |
|                    |                 | Condominium      Condominium      Single-family house      Single-family house   |
|                    |                 | Fitted out to a medium standard      Fitted out to a high standard      Fitted out to a medium standard      Fitted out to a high standard |
| Earned income      | 53              | Range from CHF 0 to CHF 500'000  |
| Assets             | 21              | Range from CHF 0 to CHF 5'000'000  |
| Commuting          | 5               | No commute      Commute to the nearest major center, public transportation      Commute to the nearest major center, private motor vehicle |
|                    |                 | Commute to the nearest medium-sized center, public transportation      Commute to the nearest medium-sized center, private motor vehicle   |
| External childcare | 2               | No external childcare      External childcare 2 days per week  |

Source: Credit Suisse

## Regional differences in the income and expenditure components of Swiss households

A large part of the prices underlying household expenditure are subject to substantial regional differences owing to the Swiss system of financial federalism or to local differences in market structures. These price differences are responsible for the variations in disposable income at regional level and are at the heart of this study. The following table illustrates the various income and expenditure factors, the corresponding regulation level and the scope of the market structure. More detailed information on data sources can be found in the Appendix.

### Regional Differences in Types of Income and Expenditure

By regulation level or the regional scope of the market structure

|  | Federation | Cantons | Municipalities | Other  |
|--|------------|---------|----------------|--|
| Transfer income (FA, PR)                               |            | X       |                |  |
| Income tax   | X          | X       | X              |  |
| Imputed rental value for owner-occupiers               |            | X       | X              |  |
| Wealth tax   |            | X       | X              |  |
| 2nd pillar contributions                               | X          |         |                |  |
| Social insurance contributions (AHV, IV, EO, ALV, NBU) | X          |         |                |  |
| Compulsory health insurance premiums                   |            |         |                | Premium regions  |
| Housing costs  |            |         |                | X  |
| Ancillary costs/charges                                |            |         |                | X  |
| Energy/electricity                                     |            |         |                | X  |
| Mobility costs (commuting)                             |            | X       | X              | Depends on distance from the workplace and transportation mode |
| Tax deductions for commuting costs                     | X          | X       | X              | Depends on distance from the workplace and transportation mode |
| Cost of external childcare                             |            | X       | X              |  |
| Tax deductions for external childcare                  | X          | X       |                |  |

**Legend:** FA: family allowance; PR: premium reductions; AHV: Federal Old Age and Survivors' Insurance; IV: Federal Disability Insurance; EO: income replacement scheme; ALV: unemployment insurance; NBU: non-occupational accident insurance

Source: Credit Suisse

## Calculating the freely disposable income

The first step in determining the freely disposable income is to calculate a household's gross income, which equals the sum of earned and pension income, investment income, and transfer income from public redistribution systems (see following table). What remains after the deduction of mandatory charges constitutes the disposable income. Households are free to spend this amount as they think fit. However, their fixed living costs have not yet been taken into account. Regional cost differences that play a role in the competition among residential locations are not restricted to mandatory charges, but also apply to costs of existential consumption. The freely disposable income is calculated by subtracting housing costs (rental or owner-occupation), ancillary costs, costs of water, sewage and waste disposal, electricity and energy charges as well as commuting costs. Hence, the freely disposable income represents the amount remaining to the household for consumption or saving.

## Calculating the freely disposable income

By type of residence and main income source

| Gainfully employed tenants  | Gainfully employed homeowners  | Pensioners  |
|---|--|---|
| <b>Earned income, gross</b>   | <b>Earned income, gross</b>  | <b>Pension income (AHV, pension)</b>                      |
| + Transfer income (PR, FA)  | + Transfer income (PR, FA)   | + Transfer income (PR, FA)                                |
| + Capital income (interest, dividends)  | + Capital income (interest, dividends)   | + Capital income (interest, dividends)                    |
| <b>= Gross income</b>   | <b>= Gross income</b>  | <b>= Gross income</b>                                     |
| - Income tax (basis: gross income, mobility deductions, childcare deductions) | - Income tax (basis: gross income, imputed rental value, mortgage interest, mobility deductions, childcare deductions) | - Income tax (depending on the type of residence)         |
| - Wealth tax  | - Wealth tax   | - Wealth tax  |
| - 2nd pillar contributions  | - 2nd pillar contributions   |   |
| - Social benefit contributions (AHV, IV, ALV, EO etc.)                        | - Social benefit contributions (AHV, IV, ALV, EO etc.)   |   |
| - Compulsory health insurance premiums  | - Compulsory health insurance premiums   | - Compulsory health insurance premiums                    |
| <b>= Disposable income</b>  | <b>= Disposable income</b>   | <b>= Disposable income</b>                                |
| - Net rental costs  | - Owner-occupation costs (mortgage interest, capital repayments for any 2nd mortgage, maintenance)                     | - Housing costs (depending on the type of residence)      |
| - Ancillary costs, costs of water, sewage, waste disposal                     | - Ancillary costs, costs of water, sewage, waste disposal  | - Ancillary costs, costs of water, sewage, waste disposal |
| - Energy and electricity costs  | - Energy and electricity costs   | - Energy and electricity costs                            |
| - Commuting costs   | - Commuting costs  |   |
| - Cost of external childcare  | - Cost of external childcare   |   |
| <b>= Freely disposable income</b>   | <b>= Freely disposable income</b>  | <b>= Freely disposable income</b>                         |

Source: Credit Suisse

### Differentiated assessment depending on type of residence and income source

Depending on the type of residence and a household's major source of income, some factors must be assessed differently. Owner-occupiers, for example, enjoy an additional tax privilege in that their mortgage interest is deductible when calculating their taxable income – though this is increased by an imputed rental value. In addition, property ownership – besides incurring mortgage interest, repayment and maintenance costs – reduces the owner's income-producing assets. All cantons permit deductions to be made from taxable income in respect of expenditure on work-related travel. This system differs from canton to canton, but it reduces the tax burden of commuters all over. The case is similar with deductions for childcare provided outside the family. For pensioners, whose main income stems from pension payments instead of earned income, mandatory charges are significantly lower, since they pay no social insurance contributions. Furthermore, as pensioners – by definition – are no longer gainfully employed, they incur no commuting costs.

### RDI indicator: applications for the broad middle class

Due to the large number of individual cases it is rather difficult to obtain an overview of the differences in the freely disposable income. We have thus calculated indicators that allow general conclusions on the financial attractiveness of the various territorial units. The RDI (Regional Disposable Income) indicator aggregates the freely disposable income for the broad middle class and various types of households and residences. For the range of earned incomes considered we use the central 80% interval of the Swiss income distribution. This way, the bulk of households in a location are taken into account, such that the statement is valid for the broad middle class.

### Aggregation of individual cases with appropriate weightings

The calculation of the freely disposable income for the above described case types has been conducted at the level of individual municipalities and urban neighborhoods. At cantonal level, the aggregate values of the municipalities are weighted by population numbers. The figures for the various combinations of types of residence and household were weighted with their relative share of the total of Swiss households.

## Results

# Disposable Income in the Swiss Cantons

The RDI indicator gives values for the urban cantons – Geneva, Basel-Stadt, Zurich, Vaud and Basel-Landschaft – that are below the Swiss average. High rents and real estate prices, as well as comparably high mandatory charges, make living in the centers an expensive proposition.

**Traditional comparisons of financial residential attractiveness are too limited**

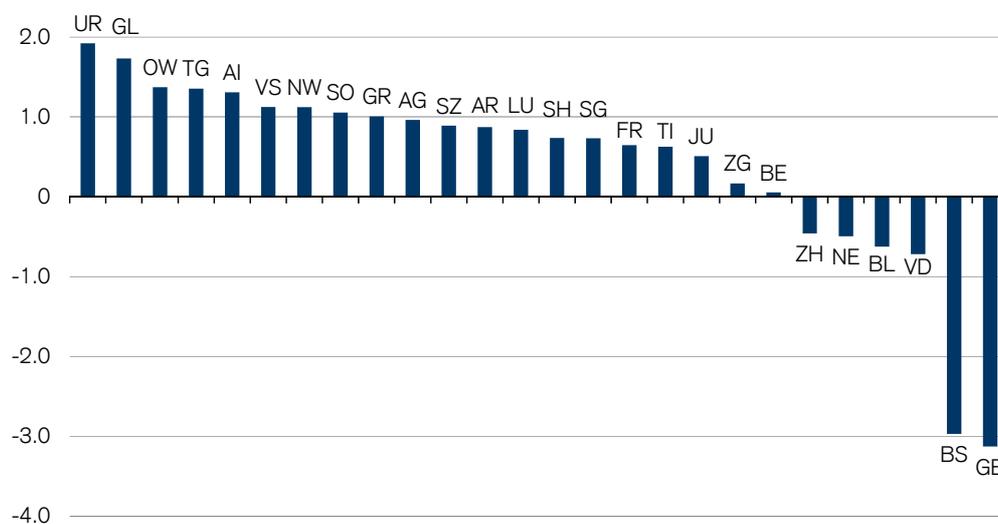
In contrast to traditional comparisons, this analysis of regional variations in freely disposable income includes new aspects. A simple comparison of tax burdens ignores the fact that high real estate prices in low-tax regions cancel out a large part of the tax savings. Furthermore, regional differences relating to other types of expenditure, such as health insurance premiums, have a significant impact. Given that a large part of the labor force commutes to the Swiss labor market centers, the cost benefits of living in agglomerations close to the centers are accentuated.

**RDI indicator for the cantons**

The RDI indicator (Regional Disposable Income) depicts the financial residential attractiveness of a region for the broad Swiss middle class relative to the national average of zero. Positive values indicate a freely disposable income higher than the Swiss average, negative values stand for income levels below the average.

### Freely Disposable Income in the Swiss Cantons (RDI indicator), 2016

Synthetic indicator, CH = 0, excluding costs for commuting and childcare, 2016



Source: Credit Suisse

**Uri defends its top ranking**

The cost of living for an average household is least expensive in Canton Uri, followed by Glarus. With low housing costs and an attractively low level of taxes and other charges, these two cantons are most appealing from a financial viewpoint. They are followed in the ranking by other rural cantons such as Obwalden, Thurgau and Appenzell-Innerrhoden. The mid-field comprises a number of variously positioned cantons with rural or suburban features.

**City life is more expensive**

At the other end of the scale are the urban cantons Geneva and Basel-Stadt, where high housing costs combined with taxes and health insurance premiums that are above the average make life expensive for the average household. Vaud, Zurich, Basel-Landschaft and Neuchâtel likewise come in below the national average of financial residential attractiveness. Here, households can choose a residence from a wide variety of urban, suburban and rural municipalities. The aggregation at cantonal level blurs the differences in financial residential attractiveness between individual municipalities. The following section contains a detailed analysis at municipal and neighborhood level.

**Cantons in Central and Eastern Switzerland have combined advantages**

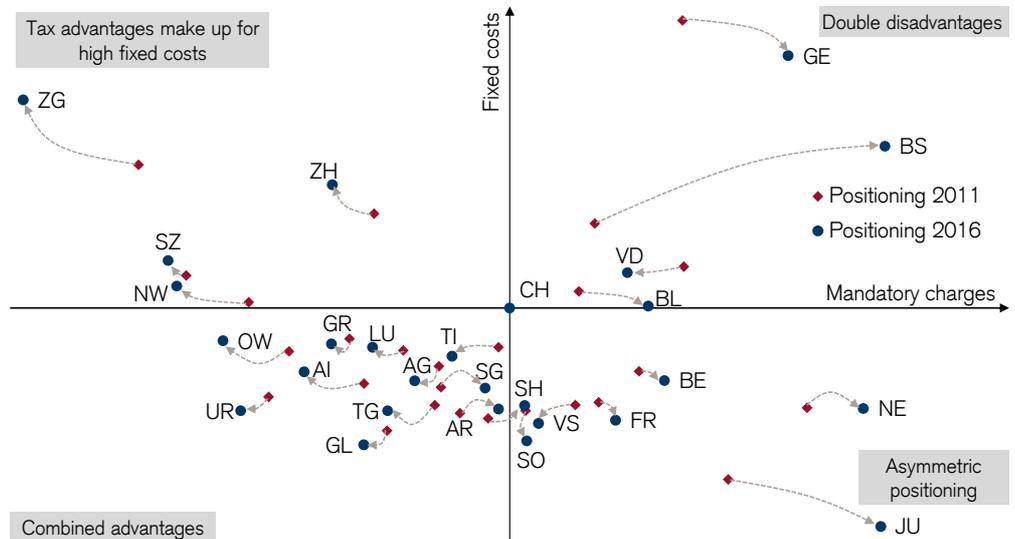
The positioning of the cantons in terms of fixed costs and mandatory charges is depicted in the chart below. From a financial viewpoint, households in smaller, rural cantons such as Uri, Glarus and the two Appenzells profit from combined advantages. In Geneva and Basel-Stadt, both taxes and fixed costs are disproportionately high for an average household.

**Jura: financially unattractive despite low housing costs**

Low fixed costs or low mandatory charges can result in a high level of financial residential attractiveness. Jura and Zug have a similar RDI value, just above the national average. In Zug, high housing costs prevent the canton from having a more attractive position, and in Jura, the above-average mandatory charges are to blame. For average households, the fiscal advantages in Zug are canceled out by high housing costs. Although housing costs in Jura are very low, the cost of living for average households is not particularly cheap, since taxes and health insurance premiums are among Switzerland's highest.

**Changes in the Spending Components in the Cantons, 2011–2016**

Mandatory charges: income and wealth taxes, social security contributions, mandatory health insurance  
Fixed costs: housing costs, ancillary costs, fees for water, energy, sewage and waste disposal; standardized values, CH = 0



Source: Credit Suisse

**No change at the top and bottom of the rankings**

Since the last calculation of the freely disposable income in 2011 there have been several changes in the rankings. Appenzell Ausserrhoden, St. Gallen and Schaffhausen have fallen furthest, while Valais, Solothurn and Aargau are the biggest gainers. Due to the relative nature of our indicators, a canton may change position due to variables in other cantons.

**Freely disposable income (RDI indicator): changes 2011 – 2016**

Rankings of the 26 cantons, excluding costs for commuting and childcare. Differences: negative = lower rank, positive = higher rank

|                            | UR | GL | OW | TG | AI | VS | NW | SO | GR | AG | SZ | AR | LU | SH | SG | FR | TI | JU | ZG | BE | ZH | NE | BL | VD | BS | GE |
|----------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RDI indicator ranking 2016 | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| RDI indicator ranking 2011 | 1  | 2  | 4  | 5  | 3  | 16 | 9  | 12 | 10 | 14 | 11 | 6  | 13 | 7  | 8  | 17 | 18 | 15 | 19 | 20 | 22 | 21 | 23 | 24 | 25 | 26 |
| Difference 2011 – 2016     | 0  | 0  | 1  | 1  | -2 | 10 | 2  | 4  | 1  | 4  | 0  | -6 | 0  | -7 | -7 | 1  | 1  | -3 | 0  | 0  | 1  | -1 | 0  | 0  | 0  | 0  |

Source: Credit Suisse

## Results

# Disposable Income at Municipal and Neighborhood Level

Many budget items vary depending not only upon the canton, but also upon the influence of regulations and cost structures at sub-cantonal level. Despite higher commuting costs, life in the agglomerations is significantly less expensive than in the city centers. Even moving a short distance can sometimes generate considerable savings.

**Major differences in residential attractiveness between municipalities of a canton**

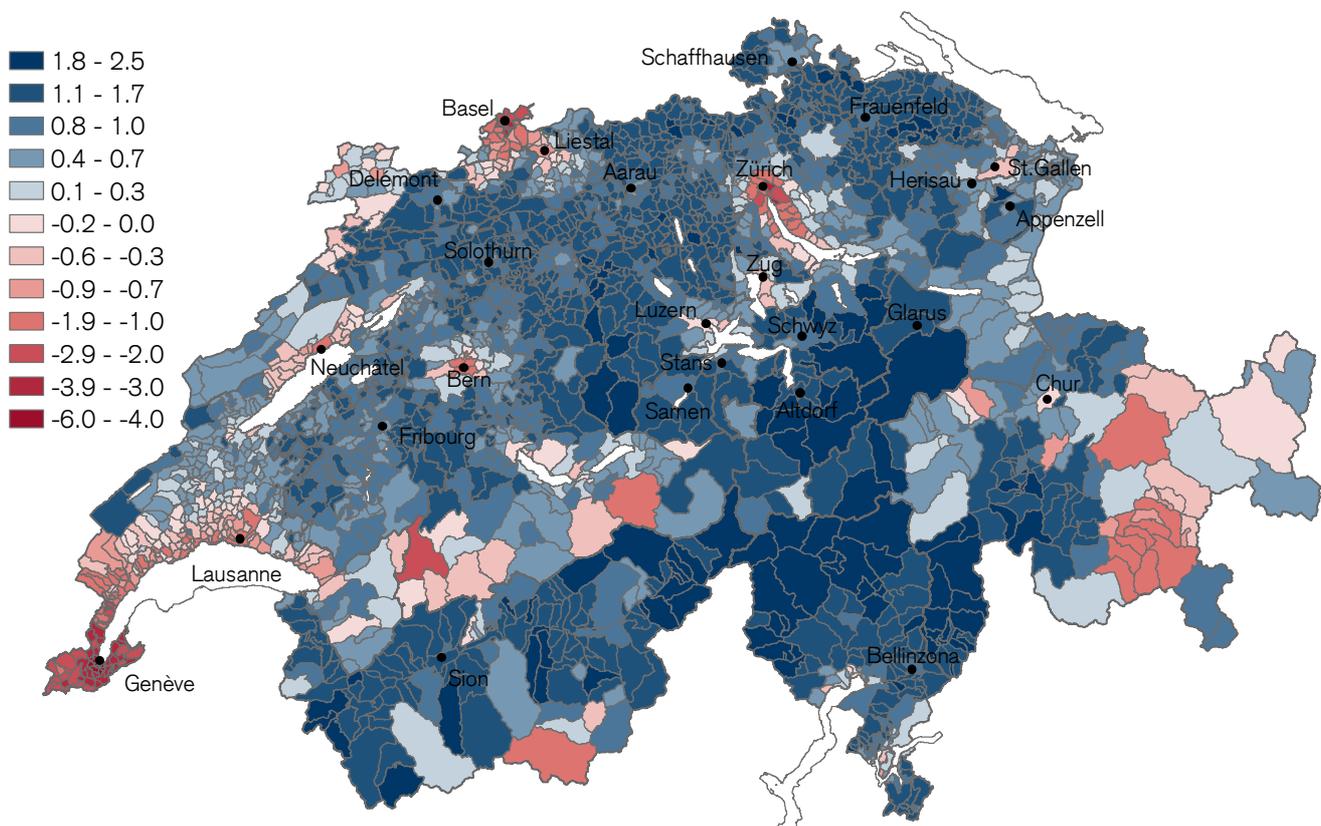
As the lowest administrative level of the Swiss state system, the municipalities are the appropriate unit for the analysis of disposable income; most components of financial residential attractiveness are either affected by locally administered prices, or they represent goods in well-defined local markets. Given the wide competencies of the municipalities under Switzerland's (financial) federalism, beside the federation and the cantons they constitute the final authority that takes decisions affecting the financial attractiveness of residential locations.

**Life in central locations is expensive**

The RDI values for the Swiss municipalities, including the costs of commuting to the nearest center, are shown in the figure below. In the major centers Zurich, Basel, Berne, Lausanne and Geneva, including the adjacent municipalities, disposable income is lowest. Apart from center regions, internationally well-known tourist areas such as the Upper Engadine, Davos, Grindelwald, Zermatt, Bagnes/Verbier and Gstaad-Saanen have RDI values that are distinctly below the average.

### Freely Disposable Income in the Swiss Municipalities (RDI indicator), 2016

Synthetic indicator, CH = 0; including the costs of external childcare and commuting to the nearest center



Source: Credit Suisse

**Sample household 1: Mr. Monod, living in Châtel-Saint-Denis (FR)**

Hypothetical example of a single-person household

Mr. Monod recently graduated and is now working in Lausanne. He is single and lives in a 60-square-meter rental apartment in Châtel-Saint-Denis. Mr. Monod earns an income of CHF 75'000, and he has inherited assets of CHF 50'000. After the deduction of all mandatory charges, his disposable income amounts to CHF 50'000. Then after considering housing costs, commuting, ancillary and electricity costs, Mr. Monod is left with CHF 31'700.

By moving to Lausanne, Mr. Monod could save 30 minutes each way as well as the annual cost of the travel pass. His freely disposable income in Lausanne would total CHF 30'200, which corresponds to a reduction of 5%.

**Sample household 2: Mr. and Mrs. Rossi, living in Lugano, Canton of Ticino**

Hypothetical example of a married couple with no children

Recently married, Mr. and Mrs. Rossi live in a single-family house in Lugano, canton of Ticino, fitted out to a high standard and bought with an 80% mortgage. They both work in Lugano, and they have joint earned income of CHF 250'000. They have assets of CHF 600'000 and their gross income amounts to CHF 253'400. After the deduction of all mandatory charges, their disposable income is CHF 157'800. Housing, ancillary and electricity costs bring the couple's freely disposable income in Lugano to CHF 85'200.

Moving to a similar property in nearby Caslano, also in Ticino, would increase their freely disposable income to CHF 89'500. The costs of commuting using two separate cars are considered in these figures, but the distance of 10 km would take each of them 12 minutes each way to complete.

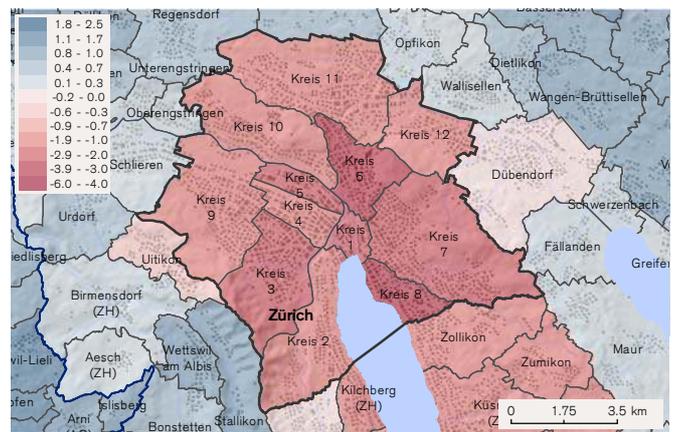
### RDI indicator for urban neighborhoods

In the major Swiss cities, rents and real estate prices differ widely from one neighborhood to another. In our analysis, we now calculate the differences in freely disposable income within the cities. Geneva's Petit-Saconnex neighborhood has the lowest financial residential attractiveness in Switzerland; the cost of living is already much lower in nearby Genève Gare. The differences are even greater in Zurich: with an RDI value of -3.5, Zurich's District 8 (Seefeld) is the most expensive. Districts 11 and 12 earn values around -1, much closer to the national average.

Source: Credit Suisse

### Costs in Zurich-North are lower than in center city

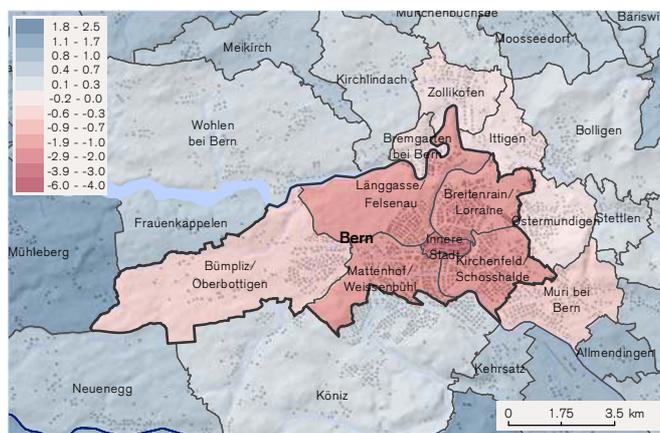
Freely disposable income (RDI indicator) for urban neighborhoods, CH = 0



Source: Credit Suisse

### Bern: Bümpliz/Oberbottigen for the cost-conscious

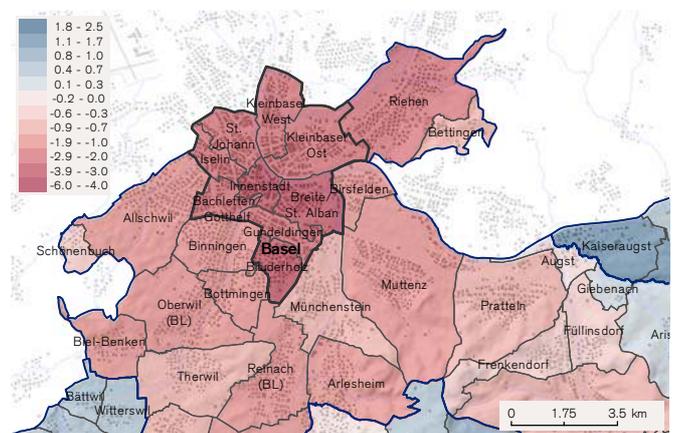
Freely disposable income (RDI indicator) for urban neighborhoods, CH = 0



Source: Credit Suisse

### Basel: Gundeldingen tops the list

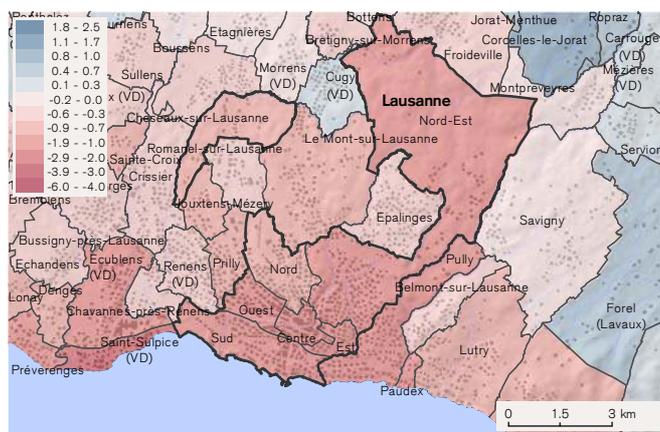
Freely disposable income (RDI indicator) for urban neighborhoods, CH = 0



Source: Credit Suisse

### Costs are lowest in Lausanne-North

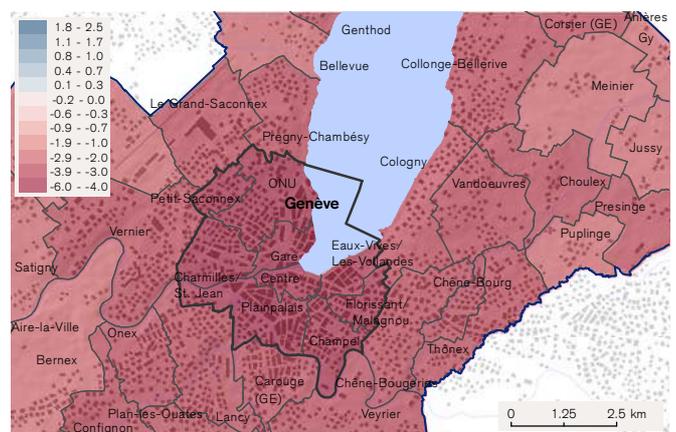
Freely disposable income (RDI indicator) for urban neighborhoods, CH = 0



Source: Credit Suisse

### Geneva: low-cost areas are scarce

Freely disposable income (RDI indicator) for urban neighborhoods, CH = 0



Source: Credit Suisse

## Components of Financial Residential Attractiveness

# Tax Burden

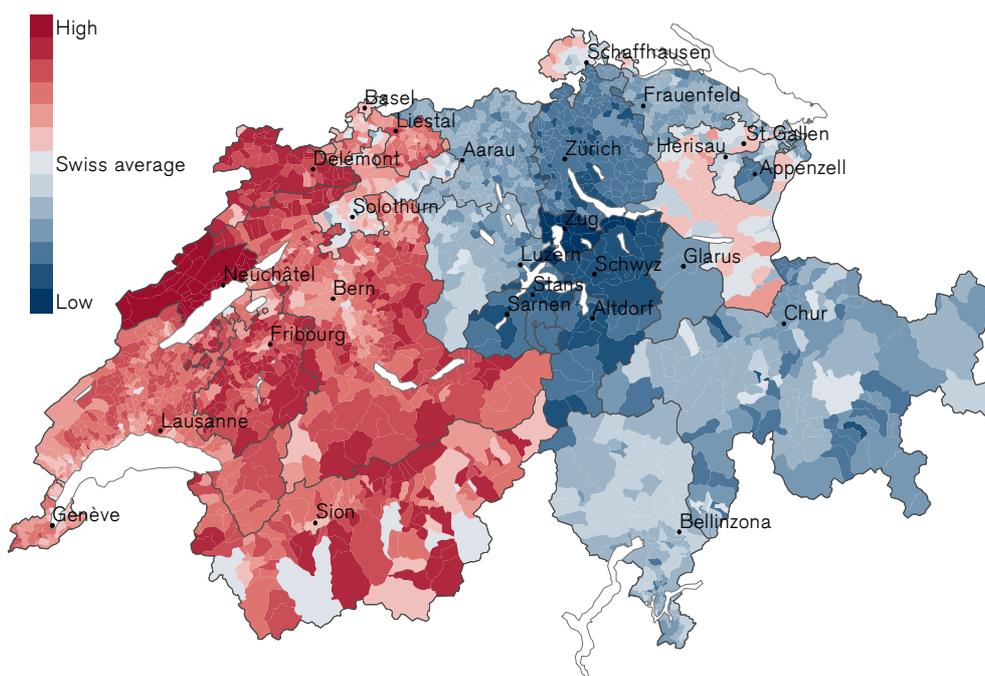
Taxes on income and wealth are among the largest items of household expenditure, accounting on average for nearly 12% of gross income. Due to Switzerland's federal structure, there are considerable differences in the taxes imposed from one region to another. Tax rates in Western Switzerland, in particular, are clearly higher.

### Fiscal division: higher taxes in Western Switzerland

For private individuals, not much has changed in the last few years in Credit Suisse's cantonal rankings of tax burdens.<sup>1</sup> Zug is at the top of the list and has widened its lead on Schwyz, where a decision was made in 2015 to raise the tax rate for the first time in decades. Nidwalden comes next, followed by Uri, which overtook Obwalden in 2009 with the introduction of its flat rate tax. Big shifts such as Uri's were not repeated in recent years, however. Only Vaud advanced four notches in the current ranking to reach 21st place, ahead of Valais, Bern, Fribourg, Jura and, in last place, Neuchâtel. On balance, Switzerland is still split geographically when it comes to tax policy: the tax burden in Western Switzerland and its municipalities remains above the Swiss average (see chart)

### Tax Burden on Private Individuals

Taxes on income and wealth, synthetic index, 2016



Source: TaxWare, Credit Suisse

### Central Switzerland attractive for all income classes

A detailed analysis of income and wealth taxes allows a more precise assessment of the tax burden on private individuals. The following table shows the tax burden in percentage points of gross income for a married couple with no children, in different income classes. In Central Switzerland, taxes at all income levels are below the Swiss average. As a rule, fiscal advantages increase as income rises. In Zug, a married couple with household income of CHF 100'000 pays around 6% less in taxes than the Swiss average for this income class. At an income of CHF 300'000, the fiscal advantage increases to 8%.

<sup>1</sup> For further information: "Locational quality 2016: Basel-Stadt Set to Overtake Canton Zurich", Credit Suisse, September 2016.

Schaffhausen, St. Gallen, Solothurn, Fribourg and Bern, on the other hand, have about the same level of attractiveness for all analyzed income classes. Basel-Landschaft and Ticino, as well as Western Switzerland, are more attractive, in cantonal comparison, for lower and mid-range incomes than for higher income classes.

**Tax savings of tens of thousands of francs possible**

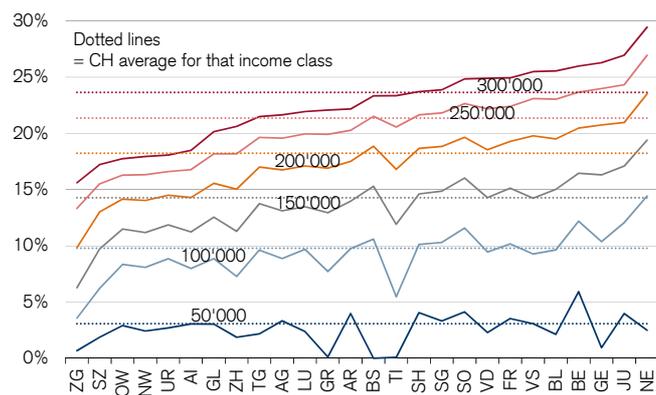
The differences observed in the percentage tax burden translate into considerable sums of money (see figure below right): the couple in Zug with an income of CHF 100'000, for example, would have to pay nearly CHF 11'000 more in taxes in Neuchâtel. With an income of CHF 300'000, the difference exceeds CHF 41'000.

**Cantons allow individual tax deductions, such as those for commuting and childcare expenses.**

In contrast to the RDI, the tax burden discussed in this section does not take into account individual deductions, which vary depending upon the canton and household characteristics. All cantons, for example, permit deductions for costs related to transportation from home to the workplace. Moreover, childcare costs can be deducted from the calculation of taxable income. In addition to these deductions, which are addressed in other sections of this study, there are further individual deductions, such as those for costs related to education and training and healthcare. However, these vary sharply from one household to another and it would exceed the scope of this study to consider them all.

**Tax rates in Central Switzerland are markedly lower for all income classes**

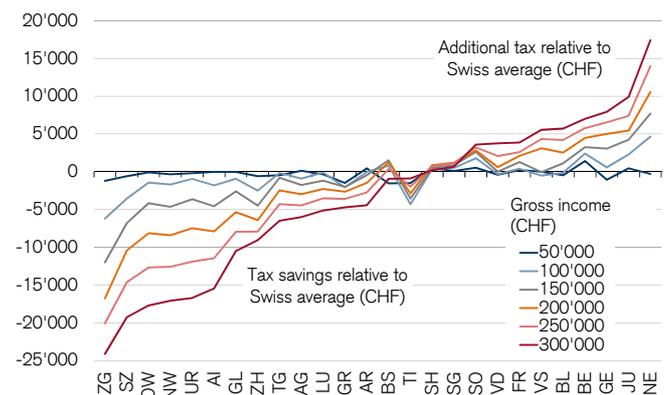
Tax burden\* as percent of gross income, by income class, 2016, married couple with no children



Source: TaxWare, Credit Suisse \* Income and wealth taxes at municipal, cantonal and federal level

**Moving can result in significantly lower taxes**

Difference to average Swiss tax burden\* in CHF, by income class, 2016, married couple with no children



Source: TaxWare, Credit Suisse \* Income and wealth taxes at municipal, cantonal and federal level

## Components of Financial Residential Attractiveness

# Housing Costs

Besides taxes, housing costs are one of the largest budget items for most Swiss households. In 2014, housing costs accounted for around 10.7% of the average household budget. The figure can be much higher, especially for lower-income households. For high-income households, the tax burden is a more decisive factor.

**RDI comprises housing costs for seven different housing types**

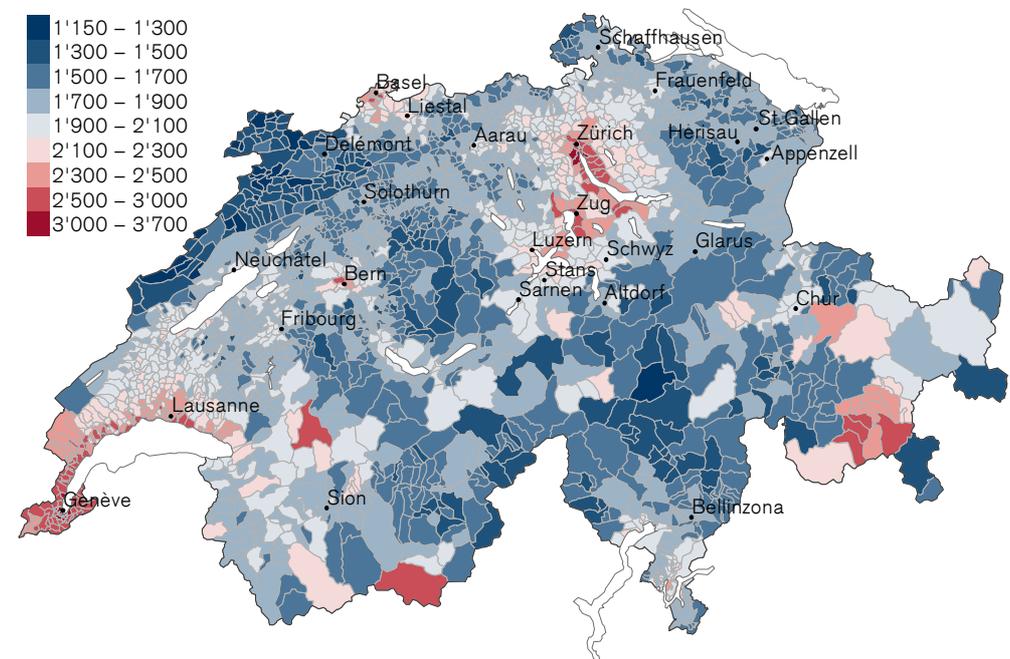
To calculate freely disposable income, we used the average housing costs per municipality or urban neighborhood (in Basel, Bern, Geneva, Lausanne and Zurich) for several housing types: rental apartments fitted out to a medium standard in three sizes, as well as condominiums and single-family houses fitted out to a medium and high standard. We also include the various possible tax deductions that apply depending on the housing type.

**High housing costs in the centers and tourist regions**

Given the regional differences in supply and demand structures, it is almost impossible to speak of a homogeneous national real estate market. Rather, there are a number of regionally distinct markets for rental and owner-occupied property. Prices thus differ widely from one residential region to another. Housing costs are considerably higher in city centers, agglomerations and in attractive tourist regions. In some municipalities of Canton Jura, the average monthly rent for a 4-room apartment fitted out to a medium standard is less than CHF 1200 (see chart below). Rents are likewise below the Swiss average of CHF 1865 in many rural communities. In some neighborhoods of Zurich and Geneva, however, a similar object would fetch over CHF 3000. Rents in the low-tax cantons of Central Switzerland, or in the tourist destinations, can also be disproportionately high.

### Monthly Rent for a 4-Room Apartment Fitted Out to a Medium Standard

Average rent excluding ancillary costs, in CHF, CH average: CHF 1865; Q2 2016



Source: Wüest Partner, Credit Suisse, Geostat

**Single-family houses in the centers unaffordable**

Regional disparities in the prices of owner-occupied properties are basically similar to those in rental prices. Due to current very low mortgage rates the financing costs for homeowners are considerably lower than in previous years. On the other hand the deductible when calculating taxable income is also lower.

## Components of Financial Residential Attractiveness

# Mobility Costs

Switzerland is a nation of commuters: 7 out of 10 employed persons work outside the town they live in; they commute an average of 14.5 km each way, which takes an average of 30 minutes. Outside the urban centers, the cost of this job-related mobility is higher. However, it is partially tax deductible and is generally more than compensated by lower housing costs.

**Commuting by public transport generally less costly**

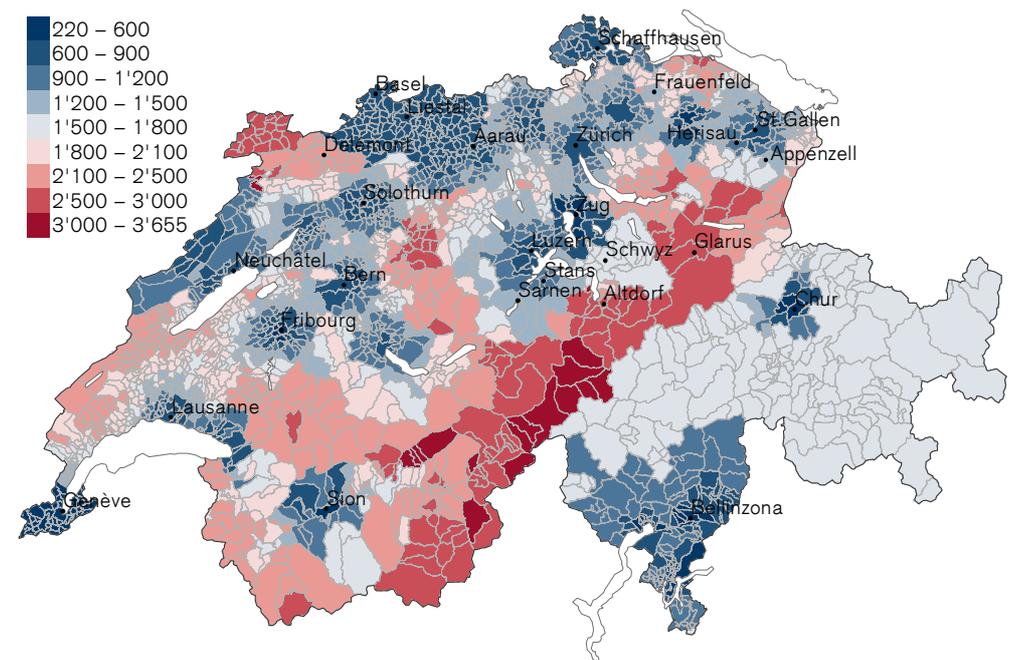
The way to work and the type of transportation used are the two main factors in commuting costs. Commuting by car can cost as much as four times more than using public transportation. But cantonal and regional factors can also impact commuting costs. Public transportation is organized into regional travel systems, where prices vary enormously. Use of a car involves tax deductions and road taxes that vary from one canton to another.

**Regional travel systems facilitate commuting**

In Switzerland, there are 22 regional travel systems, and the Swiss Federal Railways (SBB) is a member in 20 of them. These systems offer tickets and travel passes entitling the holder to the free use of the transportation services in the relevant zone. In most cases, prices are based on a system of zones – except the North-West Switzerland travel system (TNW), which covers the catchment area of the city of Basel at a standard rate of CHF 760 per year. Combinations are also available, such as the Z-Pass linking the commuter regions of Zurich, Zug–Schwyz, Aargau and North-Eastern Switzerland. Excluded from the benefits of a regional travel system are Canton Valais, most of Uri and parts of Vaud. In these regions, SBB point-to-point travel passes are the cheapest option for commuters. In Graubünden, there are local travel systems in Davos–Klosters and the Upper Engadine, as well as a GA (“Generalabonnement”) travelcard that entitles the holder to travel throughout the canton. New regions across Switzerland are steadily being integrated into existing travel systems. The following chart shows annual commuting costs by public transportation from any municipality to its nearest center.

### Commuting Costs by Public Transportation to the Nearest Large or Medium-Sized Center

Annual travel pass costs in CHF for a single adult, 2016



Source: SBB, Credit Suisse, Geostat

**Commuter deductions encourage fusion of labor and real-estate markets...**

On average, Swiss workers commute 14.5 km one way. Half of commuters use their own car, one third use public transportation, and the rest commute by bicycle, motorcycle or on foot. Much of the expenditure for mobility can be deducted from taxable income. This is an incentive to accept even lengthy commutes for work. Rapid transport has helped to blend the labor markets of the Swiss cities: a worker in Bern can easily apply for jobs in Zurich, Basel or Fribourg. This increases labor market efficiency and encourages the exchange of ideas.

**...but also promote urban sprawl, traffic jams and consumption of resources**

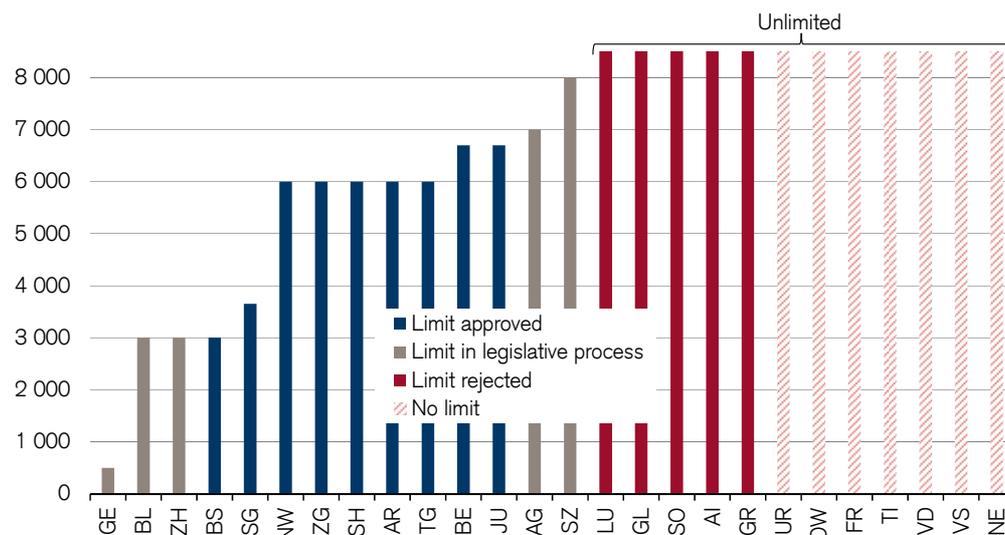
These indirect “subsidies” for commuters have come under fire for encouraging urban sprawl and traffic congestion, and for their incompatibility with climate policy. In 2016, the Swiss government lowered the commuting deduction from the direct federal tax to CHF 3'000. According to the government, this will result in higher taxes for one in five taxpayers. Some cantons, such as Basel-Stadt, Thurgau and Bern, have taken this opportunity to similarly reduce the allowable cantonal deductions. This will make longer commuting distances more expensive, which will diminish the appeal of more remote residential regions. This in turn limits the growth in prices of owner-occupied housing. Cantons such as Glarus, Valais and Uri have oriented themselves towards new residents who commute to the nearby centers in neighboring cantons. So they are understandably hesitant to limit commuting deductions at cantonal level – some have already rejected the idea.

**Uri grants the highest commuter deductions**

A majority of cantons permit a deduction equivalent only to the cost of a second-class travel pass with public transportation, even if the commuter actually uses their own car or motorcycle. If use of a private motorized vehicle can be proven to be reasonable or appropriate, the vehicle costs can be deducted from the taxes according to a cantonal cost code. There is no standard definition of the conditions, but they include cases such as illness or frailty on the part of the taxpayer, significant time savings vis-à-vis public transportation, or great distances to the nearest station or stop. Nidwalden and Uri are exceptions. Nidwalden permits unlimited use of a private car and the distance covered can be reported according to a kilometer-based cost code. The most generous canton is Uri, where deductions from taxable income are allowed at the rate of CHF 0.70 per kilometer for the first 10'000 kilometers traveled, and at CHF 0.40 thereafter. This applies regardless of the transportation mode used, and indeed even to pedestrians. Depending on the canton of residence and the distance involved, commuters can quickly arrive at deductions of more than CHF 10'000 from their income tax. In some cantons with no limits, deductions of CHF 30'000 are quite feasible (see chart below).

**Cantonal Differences Shape Deductions for Commuting**

Deductions for commuting in CHF, as at August 2016



Source: cantons, Credit Suisse

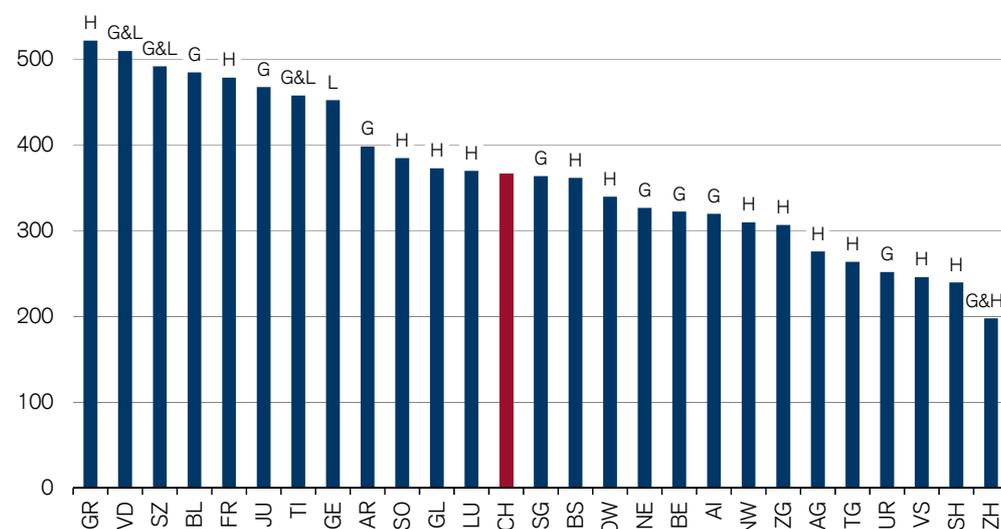
**Zurich has the lowest road tax**

The road tax for motor vehicles also differs from canton to canton. The chart below shows a cantonal comparison of tax rates for a typical private car, assuming an engine size of 1'800 cm<sup>3</sup>, output of 120 kW and a weight of 1'400 kg. Zurich has the lowest tax, at CHF 200, while the amount in Graubünden is more than twice as high at CHF 520. In most cantons, the calculation is based on engine size or vehicle weight. Geneva takes the engine output, and four

cantons use a combination of these characteristics. More and more cantons are introducing lower tax rates for energy-efficient vehicles. Electric cars in Glarus, Solothurn and Zurich, for example, are exempted from road taxes.

### Cantonal Road Taxes in Comparison, 2016

Annual tax for a private car in CHF; legend for measurement basis: H = engine size, G = weight, L = output



Source: cantons, Credit Suisse

### Sample household 3: Mr. and Mrs. Zürcher, living in Richterswil, Canton of Zurich

Hypothetical example of a retired married couple

Mr. and Mrs. Zürcher are retired. They live in a 150-square-meter rental apartment in Richterswil, canton of Zurich. They receive pensions and AHV benefits of CHF 80'000 in respect of their former gainful employment. With the income from their assets of CHF 300'000, their gross income amounts to CHF 87'500. After the deduction of income and wealth taxes as well as compulsory health insurance premiums, their disposable income is CHF 69'100. Housing, ancillary and electricity costs bring their freely disposable income down to CHF 27'500. Moving from Richterswil to a similar property in neighboring Freienbach, Canton Schwyz, would increase the couple's freely disposable income to CHF 30'000, or CHF 34'000 if they moved to Einsiedeln in Canton Schwyz. This would be equivalent to increases of 9% and 24%, respectively.

### Sample household 4: Family Urner, living in Hergiswil, Canton of Nidwalden

Hypothetical example of a married couple with two children

Family Urner lives in Hergiswil, canton of Nidwalden, in a single-family house fitted out to a medium standard that was bought with an 80% mortgage. Mr. and Mrs. Urner have two children, savings of CHF 300'000, and joint earned income of CHF 150'000. The family allowance and investment income bring their gross household income to around CHF 161'100. After the deduction of all mandatory charges (tax, pension and social insurance contributions, compulsory health insurance premiums) their disposable income is CHF 118'000. Housing, ancillary energy and electricity costs plus the costs of commuting to work in Lucerne by car bring their freely disposable income to CHF 61'800.

Moving to Altdorf, where the Urners are originally from, would increase their freely disposable income to CHF 73'000 despite the higher costs of commuting, a difference of CHF 11'200. On the other hand, their journey to work would take 35 minutes, as against 10 minutes from Hergiswil.

## How are the costs of commuting entered into the RDI?

### Costs of commuting...

The costs for personal mobility for each case type are deducted from disposable income. The costs which are relevant for the indicator include the real expenses that arise when commuting from home to work and back. These commuting costs are defined by the distance between home and work as well as by the mode of transportation and can thus cause decisive differences in the freely disposable income. Non-monetary costs, such as the time spent commuting, are difficult to quantify in Swiss francs and hence are not included in our calculation. Taking account of mobility costs enhances the explanatory power of the concept of financial residential attractiveness, as the benefits of living in a remote, low-cost location are often "bought" at the cost of long-distance, high-cost commuting.

### ...to the nearest major or medium-sized center

The huge number of possible combinations cannot be depicted appropriately, and would not be very meaningful. Hence we limit the calculation to the most important commute per municipality: from the place of residence to the nearest major or medium-sized center. Centers are defined according to the municipal typology employed by the Swiss Federal Statistical Office. The numbers shown represent costs of commuting both by public transportation and private motor vehicles. The costs are calculated on an annual basis, assuming an average of 193.4 working days.

### Mobility costs of public transportation

Public transportation costs are based on the price of the annual season ticket (travel pass) provided by the regional travel systems for the minimum number of zones required for travel between home and workplace. Where a commute is not covered by one or more regional travel system, the costs equal the price of an SBB point-to-point season ticket or a GA. In the case "Married, no children" note that a so-called "partner GA" is available at a reduced price.

### Private vehicle: calculating the full costs of commuting by private motor vehicle

The costs of commuting by private motor vehicle are based on the cumulated annual distance of the commuting journey. Appropriate vehicle types are then assigned to the various case types, taken from technical data on three of the most common vehicles in Switzerland (see below). The fixed costs are divided in terms of whether they relate to commuting or other vehicle usage, assuming a single-person household would register non-commuting motoring of 6'099 km a year. The variable costs per kilometer can be charged directly.

### Cost Overview: Commuting by Private Motor Vehicle, 2016

|                                | Cost factor                             | Calculation basis  |
|--------------------------------|---|--|
| <b>Fixed costs</b><br>per year | Annual depreciation                     | 10% of list price (straight-line)  |
|                                | Return on capital                       | 0.05% of half the list price (approx.)   |
|                                | Road tax                                | Dependent on the canton of residence and vehicle parameters  |
|                                | Third-party liability insurance         | CHF 430  |
|                                | Partial accidental damage insurance     | 1.2% of the list price   |
|                                | Other fixed costs                       | Garaging costs CHF 1500 , incidental expenses CHF 240, vehicle care CHF 150                          |
| <b>Variable costs</b>          | Depreciation                            | 2% of the list price per 10'000 km   |
|                                | Fuel costs                              | Dependent on fuel consumption with gasoline at CHF 1.46 per liter (price at the time of calculation) |
|                                | Costs for tires                         | 4 x CHF 340 per 30'000 km  |
|                                | Repairs, servicing, exhaust maintenance | CHF 630 per 10'000 km  |

Source: Touring Club Suisse, Credit Suisse

## Components of Financial Residential Attractiveness

# Health Insurance

After taxes, health insurance premiums are a household's most important mandatory expenditure. Premiums have skyrocketed in recent years, although there are still significant regional differences. Health insurance is least expensive in Canton Zug and most costly in Canton Geneva. Families in the city of Zurich are charged the highest premiums in Switzerland.

**Growing impact of premiums on a household budget**

Premiums for mandatory health insurance play a major role in determining how much money is left over at the end of the month, especially for low-income households. The increase in life expectancy and in affluence have allowed healthcare expenditure to rise for years. Healthcare costs account for more than CHF 70 billion or around 11% of Swiss GDP. In 2016, annual premiums for mandatory health insurance averaged CHF 5140 (for persons over 25 years old). In 2000, the annual average premium was just CHF 2540 – less than half today's amount. This corresponds to annual growth of 4.5%. Consumer prices rose by an annual 0.4% in the same period.

**Considerable regional differences**

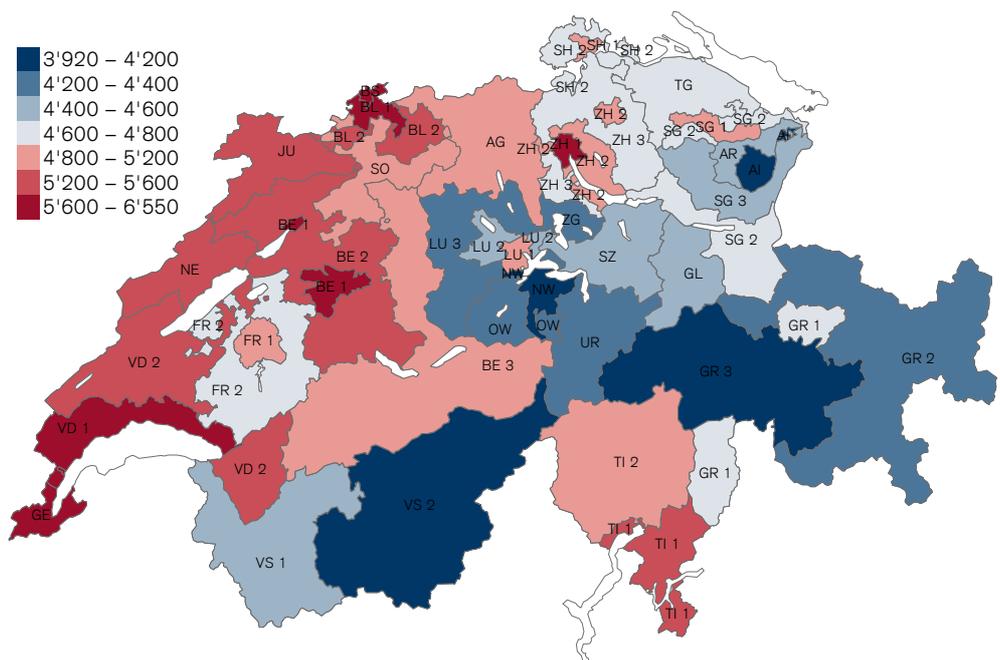
The actual amount of the premium can diverge substantially from the average. Insurance costs vary depending on residence, income and assets. The size of the basic premium – regardless of income – is different from one region to another. In addition to the regional differences in premiums, the government offers reductions based on income and assets. Since the cantons set the thresholds, the size of the reduction can also change from one area to another, and along with it, the actual net premium.

**High premiums in centers and in Western Switzerland**

The chart below shows the average annual health insurance premiums of an adult (at least 25 years old) in the 42 Swiss premium regions. Since healthcare costs vary enormously depending on the region, larger cantons, such as Bern, Graubünden, Lucerne, St. Gallen and Zurich, can be divided into up to three premium regions. The size of a region's premium should reflect the healthcare costs. Residents in rural areas use healthcare services more sparingly than city dwellers, and as a result they have lower premiums. Other factors, such as the efficiency of healthcare delivery, also affect regional price differences.

### Health Insurance Premiums for Compulsory Basic Coverage

Annual average premium in CHF; adults; standard model incl. accident with ordinary deductible of CHF 300; 2016; average CH = CHF 5140



Source: Federal Office of Public Health, Credit Suisse

**Low premiums in Central and Eastern Switzerland, and in Valais**

Basel-Landschaft, Fribourg, Schaffhausen, Ticino, Vaud and Valais are each divided into two premium regions, while all other cantons have one premium region. Moving to another municipality within a canton can have a major impact on health insurance premiums. The differences are even greater for a move to a neighboring canton. Premiums are more expensive in cities, in Western Switzerland and in Ticino. The highest premiums can be found in the urban cantons of Geneva (CHF 6550) and Basel-Stadt (CHF 6280). The lowest premiums are charged in Appenzell-Innerrhoden (CHF 3920) and Graubünden (premium region 3; CHF 4090). Health insurance premiums are generally below the average in Central and Eastern Switzerland, and in Valais.

**Moving house can trigger big changes in premiums**

In some cases, health insurance premiums can be slashed without even leaving the canton. Moving from the city of Bern to the Bernese Oberland lowers the annual premium by CHF 950. Sometimes just a few meters can make a difference: a move from the city of Zurich to a neighboring suburban municipality cuts the annual premium by CHF 900. A cantonal border that divides an agglomeration can have an even greater effect: moving a few kilometers from Basel-Stadt to Kaiseraugst (Aargau), eases the annual insurance budget by CHF 1700, while moving from Köniz (Bern) to Wünnewil-Flamatt (Fribourg) saves CHF 1250. There is also considerable savings potential between neighboring cantons such as Vaud and Valais, Ticino and Graubünden or Lucerne and Nidwalden. The division into different premium regions within a canton is often criticized, since in many cases the divisions no longer correspond to actual cost differences. The government reviewed the divisions in 2013, without making any changes.

**Complex system of reductions**

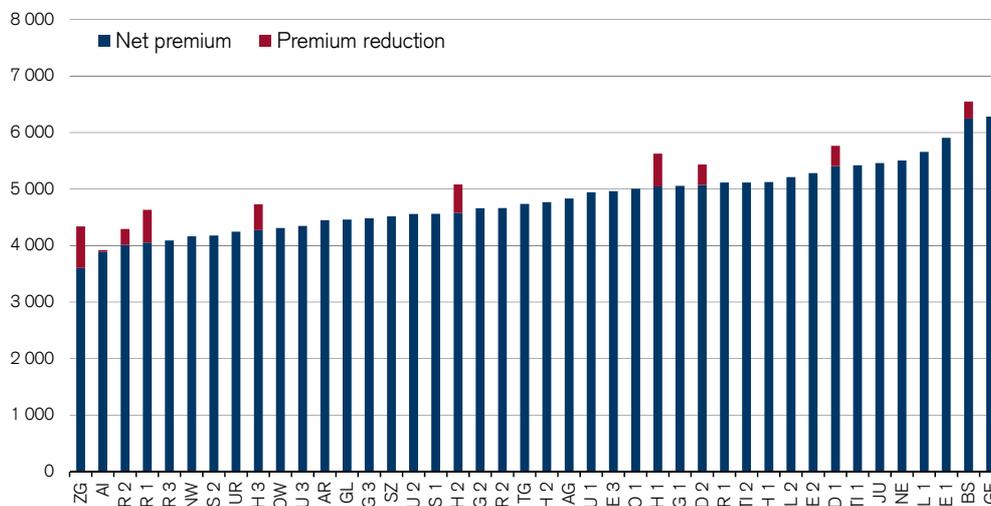
Individuals with modest financial means are eligible for premium reductions. The cantons must reduce the premiums for children, and young people in full-time education, in low-income families by at least half. In all other cases, they are free to set reductions as they see fit. The resulting cantonal systems, and the related social objectives, thus vary widely. Basel-Landschaft, Ticino and Vaud offer reductions of equal measure in all premium regions. All eligible households receive the same reduction, although the cost of the premium may vary by several hundred francs.

**Lowest premiums in Zug**

The premium reduction system enacts a shift in the cantonal premium framework. Premium reductions are offered by 21 cantons for single persons with annual gross income of CHF 30'000, and by six cantons for income of CHF 40'000. The standard insurance model including accident coverage and a deductible of CHF 300 was chosen. A single adult with CHF 40'000 in income and no assets receives the largest reduction of 17% in Canton Zug. In Appenzell-Innerrhoden, Graubünden (regions 1 and 2), Zurich, Vaud and Basel-Stadt, the canton pays a portion of the premium. In 2011, this sample household qualified for a premium reduction in 14 cantons.

**Premiums for Single Households**

Annual average premiums in CHF for a single adult with a gross income of CHF 40'000 and no taxable assets; standard model incl. accident with ordinary deductible of CHF 300; 2016



Source: Federal Office of Public Health, Credit Suisse

**Highest premiums for families in the city of Zurich**

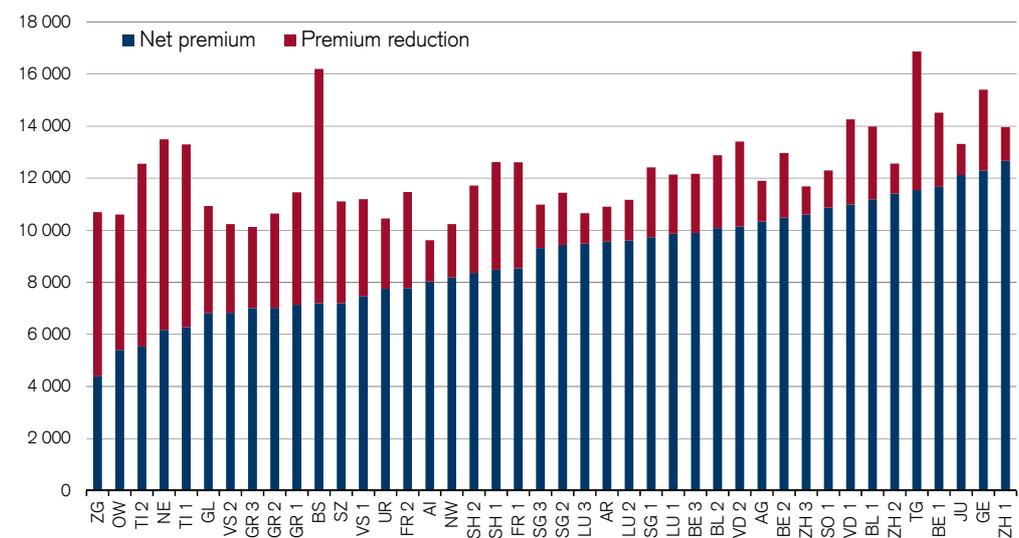
The situation is quite different for a married couple with two children, gross income of CHF 60'000 and no assets. In this case, all cantons offer a premium reduction, the average of which is 27%. Here too Zug provides the largest reduction, nearly 60%, moving it from the cheapest third of the cantons to the very top with the lowest net premiums. It is followed by Obwalden, Ticino and Neuchâtel, which also discount premiums heavily. In the mid-field are Schaffhausen (region 1) and Fribourg (region 1), which reduce premiums by a third. The most expensive premiums for families are found in the city of Zurich, Geneva, Jura and the city of Bern. Here, even after reductions, families pay between CHF 11'500 and CHF 12'500 annually for health insurance, which may add up to as much as one fifth of their gross income. The highest premium reduction in absolute terms, CHF 9000, can be found in Basel-Stadt.

**Rising volumes of premium reductions**

Across Switzerland, around 2.2 million persons benefit from a premium reduction. This corresponds to 27% of all insured persons, and the average reduction amounts to CHF 1800. The beneficiary ratio varies from 20% in Glarus to 38% in Ticino. In 2000, one out of three insured persons received a premium reduction but these were 40% lower on average than today's average reductions. On balance, the volume of premium reductions has grown: from around CHF 2.5 billion in 2000 to CHF 4.0 billion in 2014. This shows that fewer premium reductions are granted, but the amount per recipient is rising.

**Premiums for Families with Two Children**

Annual average premiums incl. accident coverage in CHF for a married couple with two children and a gross household income of CHF 60'000 and no taxable assets; standard model incl. accident with ordinary deductible of CHF 300; 2016



Source: Federal Office of Public Health, Credit Suisse

# Components of Financial Residential Attractiveness

## Childcare Costs and Family Allowances

Families profit from family allowances and tax deductions for children. However, if children are in daycare, the cost can be significant. Cantons and municipalities support families with widely varying subsidies.

**Regional differences in ease of combining work and family**

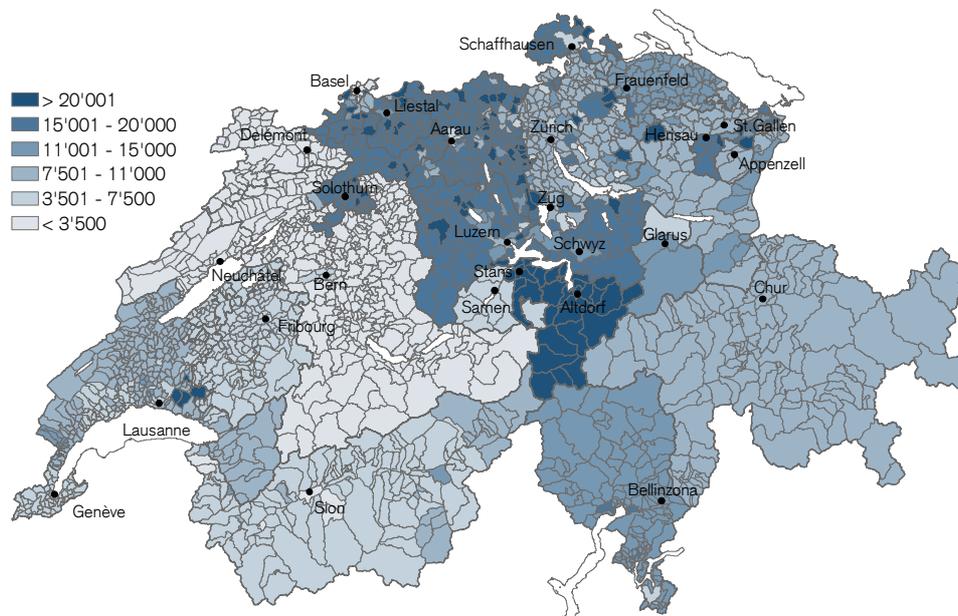
Today, women of the younger generation are at least as well qualified as their male counterparts, and in some cases better qualified. At 63.8%, the share of Swiss women who work outside the home is above the OECD average. Nonetheless, they also work significantly fewer hours than men, on average. Most working women have part-time jobs. Studies on combining work and family suggest that the high cost of non-family childcare prevents the share of working women from being higher. The availability of daycare centers also varies considerably depending on the region. Families in rural areas, in particular, may have trouble finding an appropriate childcare solution.

**Tariff regimes are barely comparable**

In order to assess the financial residential attractiveness of a location for families, we add the local factors that affect families. These include family allowances, but also tax deductions for children and external childcare. Childcare costs are a significant budget item that we include in a family's fixed costs. Depending on the canton and municipality, the charges for government-subsidized daycare and the distribution mechanism for tax deductions are very different. Since there are no statistics on local charges for government-subsidized childcare, we have gathered these at municipality and cantonal level.

### Annual Costs for External Childcare

Married with two children, two days of daycare per week, gross earned income CHF 80'000; municipalities without their own tariff regime: cantonal average



Source: Credit Suisse

**Western Switzerland has affordable tariffs**

Depending on the canton, daycare fees are fixed at cantonal or municipal level. Some municipalities have a standard rate, but the vast majority set fees based on the financial means of the household. Net income, taxable income or a combination of income and assets are used to calculate the rate. In Thurgau, the fees are determined by the taxes paid. Cantons Bern,

Neuchâtel and Jura have the least expensive daycare costs for our model household (see chart). Uri, Nidwalden and certain individual municipalities have significantly higher tariffs.

### Measurement Basis and Regulation Levels for Daycare Fees

| Canton | Level     | Basis                  | Canton | Level     | Basis                  |
|--------|-----------|------------------------|--------|-----------|------------------------|
| ZH     | Municipal |                        | SH     | Municipal |                        |
| BE     | Cantonal* | Taxable income, assets | AR     | Municipal |                        |
| LU     | Municipal |                        | AI     | Cantonal  | Taxable income         |
| UR     | Cantonal  | Taxable income, assets | SG     | Municipal |                        |
| SZ     | Municipal |                        | GR     | Cantonal  | Taxable income, assets |
| OW     | Municipal |                        | AG     | Municipal |                        |
| NW     | Municipal |                        | TG     | Cantonal  | Tax paid               |
| GL     | Cantonal  | Taxable income, assets | TI     | Municipal |                        |
| ZG     | Municipal |                        | VD     | Municipal |                        |
| FR     | Cantonal  | Earned income          | VS     | Municipal |                        |
| SO     | Municipal |                        | NE     | Cantonal  | Taxable income         |
| BS     | Cantonal  | Net income, assets     | GE     | Cantonal  | Net income             |
| BL     | Municipal |                        | JU     | Cantonal  | Net income             |

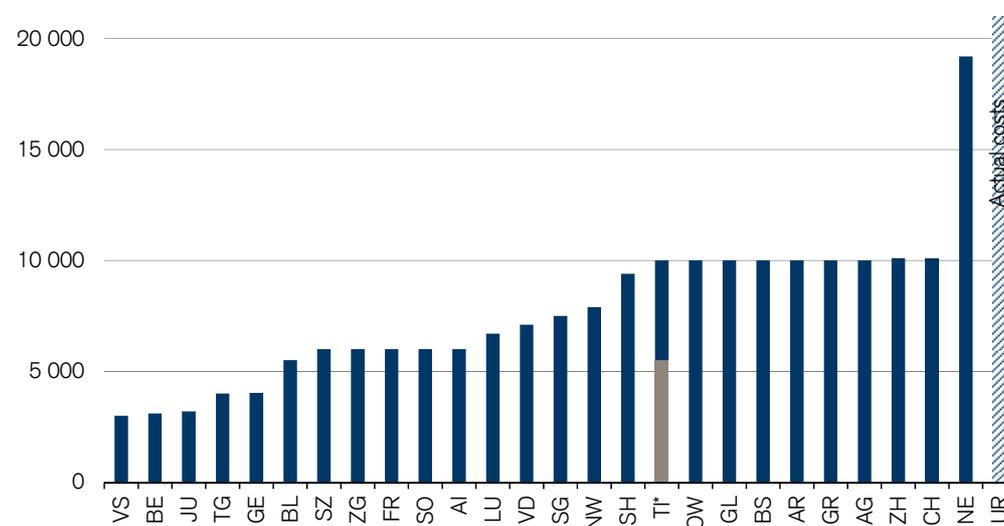
Source: Credit Suisse, cantons, municipalities \* excluding the city of Bern

### Generous deductions in Neuchâtel

Depending on a canton's political will and financial capabilities, families are permitted to deduct costs for external childcare from their income tax. Canton Neuchâtel is the most generous, with a maximum deduction of more than CHF 19'000, well above the figures for other cantons. In Uri, the actual costs can be claimed. In other cantons, deductions range from CHF 3000 in Valais to CHF 10'000. Depending on the type of care and income-dependent fees, the deductions do not equal the actual expenses incurred by households.

### Maximum Tax Deductions for External Childcare Costs

Maximum tax deduction in CHF, 2016



Source: Cantons, Credit Suisse

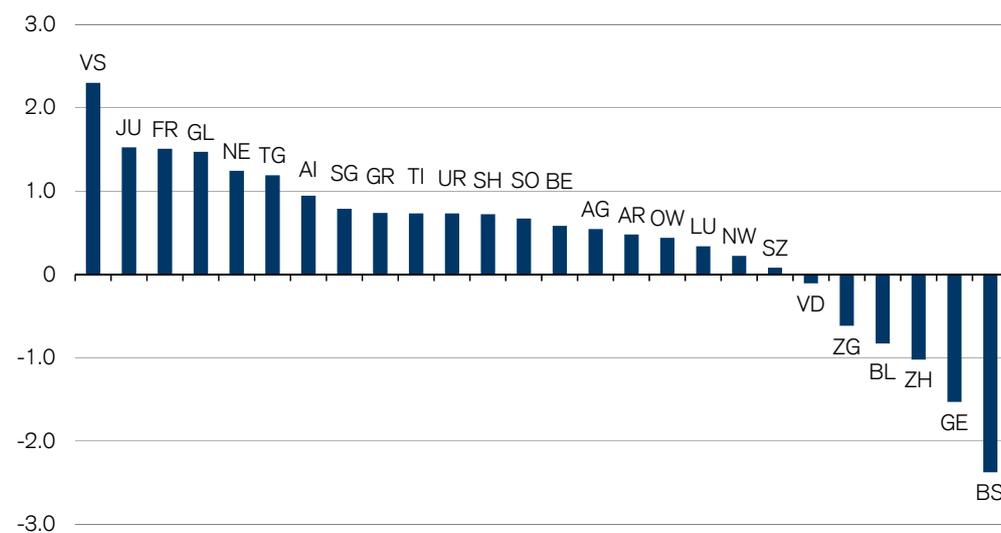
\* TI: maximum deduction income-dependent below CHF 80'000: Deduction CHF 10'000, above CHF 80'000: Deduction CHF 5500

### RDI indicator for families with external childcare

Considering all the costs related to a certain location, it is least expensive for households with children in non-family childcare in Cantons Valais, Jura and Fribourg. In addition to low housing costs, families here benefit from more generous subsidies for daycare and relatively moderate taxes. On balance, family allowances, daycare subsidies and deductions for childcare tend to be higher in the cantons of Western Switzerland than in German-speaking regions of the country, making the Suisse Romande more attractive for families with children in external childcare.

### Financial Residential Attractiveness for Families with Children in External Childcare

Synthetic indicator, CH = 0; married with two children, two days of daycare per week; excluding costs for commuting, 2016



Source: Credit Suisse

#### Sample household 5: Family Tanner, living in Solothurn (SO)

Hypothetical example of a married couple with 2 children in external childcare 2 days a week

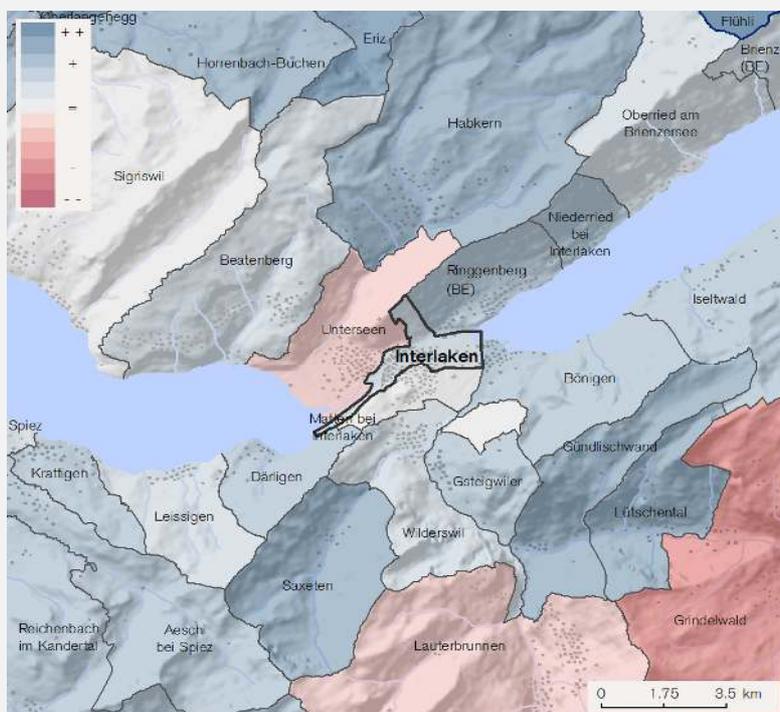
Family Tanner lives in Solothurn in a condominium fitted out to a medium standard that was bought with an 80% mortgage. Mr. and Mrs. Tanner have two children, savings of CHF 250'000, and joint earned income of CHF 120'000. The family allowance and investment income bring their gross household income to around CHF 133'800. After the deduction of all mandatory charges (tax, pension and social insurance contributions, compulsory health insurance premiums) their disposable income is CHF 91'400. Their two children are in daycare two days a week, which costs CHF 14'300 per year. Considering the costs for external childcare, housing, ancillary, energy and electricity costs, plus the costs of commuting, the remaining freely disposable income is CHF 53'800.

Moving to Utzenstorf, canton of Bern, where daycare costs much less at CHF 5'600 per year, would increase the freely disposable income to CHF 65'800 despite the higher commuting costs. The Tanners would have around CHF 12'000 more money per year for discretionary spending.

## Disposable Income in Swiss Municipalities

### Factsheet | Interlaken

#### RDI indicator (Regional Disposable Income)



#### Facts & Figures

|                               |                      |
|-------------------------------|----------------------|
| Canton                        | BE                   |
| District                      | Interlaken-Oberhasli |
| Population (2015)             | 5'692                |
| Population growth (2005-2015) | 8.8%                 |
| Employment (2014)             | 5'239                |

#### Disposable Income

##### RDI indicator

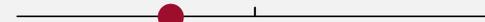


#### Costs

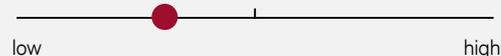
##### Mandatory charges



##### Fixed costs



##### Childcare (incl. tax impact)



#### Disposable Income by Type of Reference Household and Commuter Route

| Household type      | Single person                      | Married couple (no children)     | Family (2 children)                | Family (2 children, incl. childcare) | Retired couple                      |
|---------------------|------------------------------------|----------------------------------|------------------------------------|--------------------------------------|-------------------------------------|
| In employment       | 1 person                           | 2 persons                        | 1 person                           | 2 persons                            | Retired                             |
| Income              | 75'000                             | 250'000                          | 150'000                            | 120'000                              | 80'000                              |
| Assets              | 50'000                             | 600'000                          | 300'000                            | 250'000                              | 300'000                             |
| Living situation    | Rented apartment, 60m <sup>2</sup> | High-quality single family house | Medium-quality single family house | Medium-quality condominium           | Rented apartment, 100m <sup>2</sup> |
| <b>Commute to</b>   |                                    |                                  |                                    |                                      |                                     |
| Bern                | <b>CHF</b>                         | <b>CHF</b>                       | <b>CHF</b>                         | <b>CHF</b>                           | <b>CHF</b>                          |
| Car                 | 23'600                             | 81'900                           | 69'800                             | 51'700                               | –                                   |
| Public transport    | 30'300                             | 98'900                           | 76'900                             | 58'800                               | –                                   |
| Thun                | <b>CHF</b>                         | <b>CHF</b>                       | <b>CHF</b>                         | <b>CHF</b>                           | <b>CHF</b>                          |
| Car                 | 26'600                             | 88'200                           | 72'900                             | 54'900                               | –                                   |
| Public transport    | 31'000                             | 100'200                          | 77'600                             | 59'600                               | –                                   |
| <b>No commuting</b> | 32'500                             | 102'200                          | 79'100                             | 61'100                               | 28'300                              |

## Factsheet | Interlaken



## Disposable Income, Comparison of Municipalities (Reference Households incl. Commuting)

|                           | RDI indicator | Single person | Married couple (no children) | Family (2 children) | Family (2 children, incl. childcare) | Retired couple |
|---------------------------|---------------|---------------|------------------------------|---------------------|--------------------------------------|----------------|
| Interlaken                | 0.13          | 28'800        | 94'200                       | 75'300              | 57'200                               | 28'300         |
| Unterseen                 | -0.33         | 28'700        | 80'200                       | 66'600              | 56'600                               | 27'800         |
| Matten bei Interlaken     | -0.05         | 28'300        | 88'500                       | 72'000              | 59'700                               | 27'700         |
| Bönigen                   | 0.36          | 29'000        | 97'200                       | 78'000              | 58'700                               | 29'700         |
| Ringgenberg (BE)          | 0.33          | 29'200        | 93'100                       | 75'000              | 61'300                               | 30'200         |
| Därligen                  | 0.51          | 30'600        | 96'000                       | 76'800              | 61'700                               | 32'000         |
| Wilderswil                | 0.19          | 28'900        | 94'300                       | 75'700              | 58'400                               | 28'500         |
| Gsteigwiler               | 0.47          | 30'000        | 94'800                       | 77'300              | 62'600                               | 32'000         |
| Niederried bei Interlaken | 0.36          | 29'300        | 92'500                       | 75'500              | 61'400                               | 31'700         |
| Leissigen                 | 0.28          | 30'500        | 89'500                       | 73'400              | 61'900                               | 31'300         |
| Habkern                   | 0.93          | 31'000        | 101'100                      | 80'800              | 65'200                               | 35'000         |
| Iseltwald                 | 0.40          | 29'300        | 96'000                       | 78'100              | 58'800                               | 31'400         |
| Gündlischwand             | 0.71          | 30'200        | 99'400                       | 80'200              | 62'300                               | 33'400         |
| Oberried am Brienersee    | 0.10          | 28'700        | 89'200                       | 74'000              | 57'700                               | 30'800         |
| Saxeten                   | 0.97          | 31'000        | 103'200                      | 82'100              | 63'200                               | 34'900         |
| Krattigen                 | 0.60          | 31'100        | 97'400                       | 76'800              | 63'700                               | 31'300         |
| Beatenberg                | 0.26          | 28'800        | 94'000                       | 76'700              | 59'500                               | 30'100         |
| Spiez                     | 0.15          | 30'700        | 89'500                       | 72'600              | 59'700                               | 28'900         |
| Wimmis                    | 1.06          | 32'400        | 105'300                      | 82'000              | 67'000                               | 33'200         |
| Lütschental               | 0.84          | 30'700        | 101'500                      | 80'100              | 61'800                               | 34'000         |
| Aeschi bei Spiez          | 0.62          | 31'300        | 98'300                       | 78'100              | 62'000                               | 31'500         |
| Oberhofen am Thunersee    | -0.49         | 30'100        | 80'500                       | 65'100              | 54'800                               | 24'900         |
| Sigriswil                 | -0.08         | 30'700        | 86'000                       | 70'000              | 55'900                               | 28'800         |
| Lauterbrunnen             | -0.37         | 27'500        | 87'100                       | 72'500              | 46'800                               | 27'800         |
| Reutigen                  | 0.77          | 32'200        | 100'400                      | 78'900              | 64'900                               | 32'100         |
| Brienz (BE)               | 0.09          | 28'000        | 90'500                       | 74'200              | 58'400                               | 29'700         |
| Hofstetten bei Brienz     | 0.65          | 29'400        | 97'900                       | 78'300              | 64'200                               | 33'000         |
| Schwanden bei Brienz      | 0.48          | 29'100        | 95'100                       | 76'400              | 62'700                               | 32'200         |
| Brienzwiler               | 0.56          | 29'500        | 96'700                       | 78'600              | 63'600                               | 33'100         |
| <b>Thun</b>               | <b>-0.09</b>  | <b>31'700</b> | <b>85'100</b>                | <b>67'700</b>       | <b>59'000</b>                        | <b>27'900</b>  |
| <b>Bern</b>               | <b>-1.27</b>  | <b>28'700</b> | <b>71'900</b>                | <b>57'500</b>       | <b>36'600</b>                        | <b>20'300</b>  |

**RDI indicator:** standardized figure of the disposable income for a wide range of households (0 = Swiss average)

- + **Income** (employment, assets, occupational pensions, transfer payments)
- **Mandatory charges** (income and wealth taxes, social security contributions, pension contributions, health insurance premiums)
- **Fixed costs** (living costs, ancillary expenses, electricity costs)
- **Commuting costs**, partly tax-deductible
- **Childcare** (nursery costs), partly tax-deductible

**Contact**

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**Further Information**

Study «Housing, Commuting, Childcare: Where's the Least Expensive Place to Live» (2016)  
[www.credit-suisse.com/research](http://www.credit-suisse.com/research)

Details of sources are contained in the above-mentioned study.

## Appendix

# Data sources

### Overview of Income and Expenditure Factors Utilized

Abbreviation, regional delimitation, data sources

|  |     | Regional delimitation |        |              | Year | Source                           |
|--|-----|-----------------------|--------|--------------|------|----------------------------------|
|  |     | CH                    | Canton | Municipality |      |                                  |
| <b>Transfer income</b>                                   |     |                       |        |              |      |                                  |
| Premium reductions (by premium region)                   | PV  |                       | (X)    | (X)          | 2016 | Cantons                          |
| Family allowances  | FA  |                       | X      |              | 2016 | Federal Social Insurance Office  |
| <b>Mandatory charges</b>                                 |     |                       |        |              |      |                                  |
| Income-tax rates   |     |                       |        | X            | 2016 | TaxWare                          |
| Wealth-tax rates   |     |                       |        | X            | 2016 | TaxWare                          |
| Imputed rental value for owner-occupiers                 |     |                       | X      | X            | 2016 | Cantons, Credit Suisse           |
| Federal Old Age and Survivors' Insurance                 | AHV | X                     |        |              | 2016 | Federal Social Insurance Office  |
| Federal Disability Insurance                             | IV  | X                     |        |              | 2016 | Federal Social Insurance Office  |
| Income replacement scheme                                | EO  | X                     |        |              | 2016 | Federal Social Insurance Office  |
| Unemployment Insurance                                   | ALV | X                     |        |              | 2016 | Federal Social Insurance Office  |
| Non-occupational accident insurance                      | NBU | X                     |        |              | 2016 | Federal Social Insurance Office  |
| Occupational pensions                                    |     | X                     |        |              | 2016 | Federal Social Insurance Office  |
| Compulsory health insurance premiums (by premium region) |     |                       | X      | (X)          | 2016 | Federal Office of Public Health  |
| <b>Fixed costs</b>                                       |     |                       |        |              |      |                                  |
| Transaction prices for residential real estate           |     |                       |        | X            | 2016 | Wüest Partner                    |
| Apartment rental prices                                  |     |                       |        | X            | 2016 | WüestPartner                     |
| Electricity prices                                       |     |                       |        | X            | 2016 | Federal Electricity Commission   |
| Charges for sewage, water and waste disposal             |     |                       |        | X            | 2016 | Price watchdog                   |
| Ancillary and energy costs                               |     | X                     |        |              | 2016 | Swiss Federal Statistical Office |
| Commuting costs: public transportation travel passes     |     |                       |        | X            | 2016 | SBB, Credit Suisse               |
| Commuting costs: private motor vehicle                   |     |                       |        | X            | 2016 | TCS, Credit Suisse               |
| Tax deductions for commuting costs                       |     |                       | X      |              | 2016 | Cantons, Credit Suisse           |
| Cost of external childcare                               |     |                       | X      | X            | 2016 | Daycare centers, Credit Suisse   |
| Tax deductions for external childcare                    |     |                       | X      |              | 2016 | Cantons                          |

Source: Credit Suisse

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