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The Dual Income Tax System in Sweden

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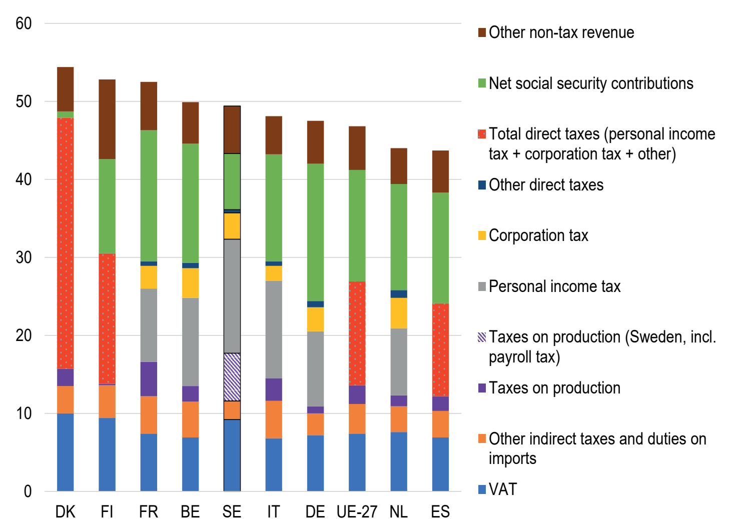
- For quite some time Sweden has stood out for its high level of aggregate tax and social security contributions, but over the past twenty years the tax burden has significantly lightened. Households are the hardest hit by the Swedish taxation system. Most general government revenue is generated by indirect taxation and personal income tax, with the latter financing local authorities to a large degree and its marginal rate exceeding 50% in the higher brackets. Tax on personal assets is low.

- Most notably, Sweden was the first country to introduce a dual income tax system, with the progressive taxation of labour income and the flat-rate tax for capital income, as part of a major reform in 1991. With a view to bolstering competitiveness, there has also been a constant effort to cut rates and broaden the tax base. The corporation tax rate has been gradually lowered to 20.6%, matching the EU average.

- The moderate level of social security contributions is partly attributable to the pension system's strong reliance on capitalisation. Generally speaking, taxation of the labour factor nevertheless remains relatively high as a result of the general payroll tax.

- The 1991 reform resulted in a foreign direct investment boom and a pick-up in the pace of total factor productivity growth. Over the long term, Sweden has one of the highest business investment rates in the EU, but taxation of the labour factor is accompanied by structurally high unemployment.

Breakdown of general government revenue by tax type in 2021 (% of GDP)



Source: Eurostat and the Swedish Ministry of Finance.

1. An atypical tax structure in Europe

1.1 The tax system in place is still largely based on the major 1991 reform

The tax reform which entered into force in 1991, dubbed the "reform of the century" in Sweden, was implemented at a time when the country was heading into its worst post-war recession (GDP decline of 5.3% over the 1991-1993 period). The severity of this crisis was the result of the impact of the bursting of the property bubble on the banking sector after real estate companies went bankrupt (the Nordbanken bank was as a result nationalised in 1993) and a currency crisis compounding the banking crisis (exit from the European Monetary System in November 1992, devaluation of the krona in excess of 20% and a sharp rise in interest rates). The Swedish authorities justified the tax reform as a means to address the need to overhaul a declining model (loss of competitiveness, persistent internal and external imbalances etc).[1]

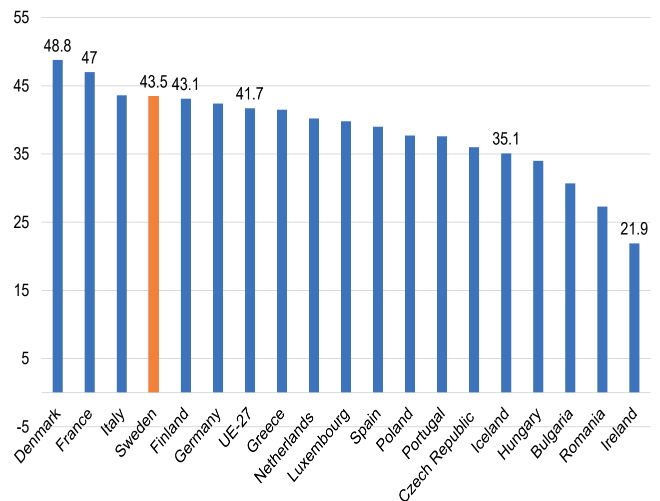
With this reform, Sweden was one of the first countries in the world to introduce a dual income tax system, combining a flat-rate tax for capital income and a progressive tax for labour income, with a general goal of reducing tax rates while widening the tax bases. The system's overhaul resulted in a significant cut in income tax rates for the higher brackets (the marginal rate exceeded 70% for top earners) and in capital income taxation (flat rate of 30%).

1.2 High levels persist despite a significant drop over the last 20 years

Tax revenue neutrality was one of the goals of the 1990-1991 reform. Today, Sweden, much like other Nordic countries, posts a tax revenue to GDP ratio above the European average. In 2021, total general government revenue amounted to 49.4% of Sweden's GDP.

However, over the past twenty years the tax burden has significantly decreased. The total revenue to GDP ratio has fallen by nearly seven percentage points (with a 5.5-point decrease in tax revenue) with the decrease primarily occurring in the 2000-2011 period. This decline is the result of a sharp drop in the contribution of personal income tax revenue (-2.5 percentage points of GDP) following the introduction of the earned income tax credit (EITC) in 2017 and almost full tax relief on social security contributions levied on employees for their pensions that was applied in the early 2000s.

Chart 1: Aggregate tax and social security contribution rate in 2021 (% of GDP)



Source: Eurostat and OECD.

Under the Swedish tax system, households are taxed at a relatively high rate through a combination of income tax and indirect taxes:

- Contributing the main share of Sweden's general government revenue, personal income and personal asset taxes constitute nearly 30% of this revenue (and 14.6% of GDP), well above the EU average (see the chart on page 1).
- The level of indirect taxation (VAT, environmental taxes, excise duty on alcohol) is also in the upper half of the EU country average range, representing 11.6 % of GDP in 2021 (see Table 1).

(1) See G. Chabert and L. Clavel (2012), "Lessons for today from Sweden's crisis in the 1990s", *Trésor-Economics* No.105.

Table 1: Breakdown of Sweden's general government revenue by tax type in 2021

	Share of total revenue (%)	Share of GDP (%)
Direct taxes	37.2	**18.4**
Income tax	29.6	14.6
Corporation tax	6.8	3.4
Other	0.8	0.4
Indirect taxes	**23.4**	**11.6**
VAT	18.5	9.2
Other (excise duty, imports)	4.9	2.4
Net social security contributions	**14.6**	**7.2**
Taxes on production	**12.4**	**6.1**
Payroll tax	10.5	5.2
Other non-tax revenues	**12.3**	**6.1**
Total revenues	**100**	**49.4**

Source: Eurostat, the Swedish Tax Agency (Skatteverket) and Stockholm Regional Economic Department calculations.

1.3 A relatively high share of tax revenue allocated to local governments

Under the 1974 Constitution of Sweden, municipalities and regional councils are authorised to levy taxes to finance their activities. In practice, these bodies receive a considerable share of income tax, the rate of which they set themselves. What makes Sweden particularly unique is that, out of all EU countries, it allocates the greatest share of tax revenue to local governments (30% of the total in 2021, compared to the 10% EU average). This is a reflection of the leading role municipal and regional governments play in steering social policies (also known as the welfare state), with social security funds only receiving a small share (6.2% in 2021), the lowest in the EU behind Denmark. For example, almost 70% of financing for the healthcare system, which is the responsibility of Sweden's 21 regional councils, is secured by taxes (see above) and capitalisation plays an important role in financing pensions.

Approximately two thirds of the revenue of local authorities (290 municipalities and 21 regional councils) stem from income tax. The remainder is sourced from contributions by the central government (23% of the revenue of municipalities and 22% of that of regional councils), and the remaining portion of any fees, duties and rents.

2. The key role of indirect taxation

2.1 High VAT levels

VAT was introduced in Sweden in 1969. The 1991 tax reform expanded the scope of application of VAT to include more products, particularly in the service and energy sectors (once again with a view to broadening the tax base). VAT legislation was subsequently harmonised with the "acquis communautaire" (VAT directive). In Sweden, the standard VAT rate is 25% and is applied to most goods and services. There are two reduced VAT rates (medical consultations and healthcare are VAT exempt, under certain conditions, as well as a number of other activities):

- A 12% rate applied to food products and hotel and catering services
- A 6% rate applied to newspapers, books and magazines, passenger transport within Sweden, tickets for artistic and cultural events, and certain leisure activities.

VAT revenue alone accounted for 9.2% of 2021 GDP (versus 7.4% for France and the EU average), around a fifth of tax revenue.

2.2 Effective environmental taxes, particularly in the housing sector

Environmental taxes (1.9% of GDP in 2021) account for the largest share of other indirect taxes (2.4% of GDP in 2021). Sweden has been known to impose a high rate of environmental taxes, and their effectiveness has even resulted in a shrinking of their tax base (see Table 2). Carbon tax, instituted in 1991, was nearly €120 per tonne of CO2 in 2022, one of the highest of its kind in the world. The hike in green taxation, accompanied by labour tax cuts (as part of far-reaching reforms launched in the early 2000s),[2] fast-tracked the green transition in Sweden, which also happens to have made the most progress out of all EU countries, with renewables accounting for 60% of total gross final energy consumption. This transition has had a dramatic impact on housing, with an exemption from carbon tax introduced for biomass-fuelled district heating. As for fuels, the relative drop in revenue is attributable to (i) the boom in bioenergy, which now constitutes two thirds of Sweden's renewables, and (ii) cuts in excise duty on fuels which aimed to curb the rising costs triggered by the increased biofuel blend rate for petrol and diesel.

Table 2: Green taxation in Sweden – 1994-2021 (% of GDP)

	1994	2002	2010	2018	2021
Energy taxes	**2.31**	**2.27**	**2.03**	**1.52**	**1.42**
Tax on fuels	1.16	0.89	0.56	0.52	0.49
Tax on electricity	0.33	0.54	0.59	0.51	0.50
Carbon tax on fuels	0.63	0.77	0.76	0.48	0.40
Taxes on pollution	**0.06**	**0.08**	**0.03**	**0.05**	**0.06**
Transport taxes (excl. fuels)	**0.34**	**0.32**	**0.46**	**0.44**	**0.42**
Tax on vehicles	0.23	0.29	0.33	0.27	0.29
Total environmental taxes	**2.71**	**2.69**	**2.52**	**2.01**	**1.90**
EU average: total environmental taxes	**ND**	**2.54**	**2.36**	**2.40**	**ND**

Source: Statistics Sweden.

3. Income tax accounts for a large share of the financing of local authorities

3.1 The central government budget receives revenue from income tax levied on top earners

Income tax, withheld at source, can be broken down into two tax categories, the proceeds of which finance respectively local authorities and the central government budget with a common tax base (which can be set solely by the Swedish central government):

- Local income tax (received by municipalities and regional governments) is paid by the vast majority of taxpayers beyond a relatively low threshold: the income tax rate, which is proportional, is set by regional and municipal authorities. The average rate is around 21% for municipalities and 11% for regions, making for an average overall rate of 32% in 2023 and ranging from 29% to 35%.
- National income tax introduces a degree of progressivity as income is only taxed an additional 20% by the central government once a set threshold is crossed (SEK 613,900 in 2023).
- Any individual with tax residence in Sweden (including pensioners and recipients of social security benefits) is liable to pay personal income tax unless their annual income is below a certain threshold. Thanks to this exemption, students and apprentices can have a part-time job while not being liable to pay tax. The tax payable is withheld at source by the employer, and taxation is carried out on an individual basis (the notion of "tax household" does not exist). For top earners, the marginal rate is therefore high at roughly 52% (max. 55.15%).
- As mentioned above, personal income tax has fallen sharply over the last 20 years following the introduction of the earned income tax credit (see Box 1).

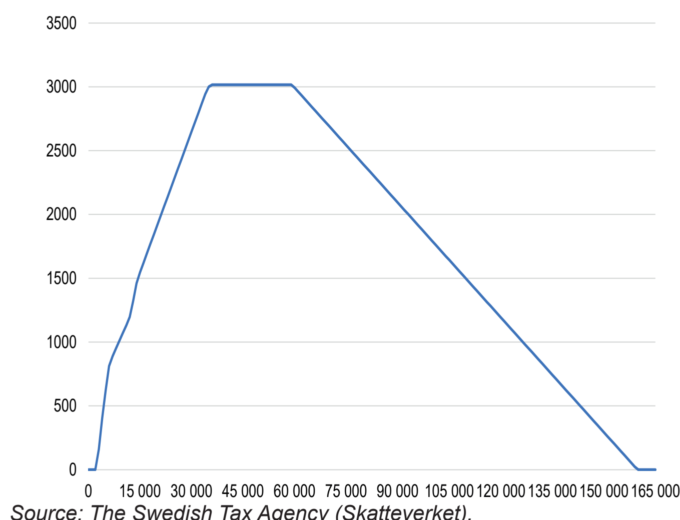
(2) See J. Grosjean and E. Duédal (2021), "Climate Strategies in the Nordic Countries", *Trésor-Economics* No. 285.

Box 1: Earned income tax credit

The earned income tax credit (*jobbskatteavdrag*) was instituted in 2007 and subsequently bolstered. It aims to stimulate labour supply in a similar approach to its French counterpart adopted in 2001 (until the latter was merged with the in-work income supplement – RSA Activité – to become the in-work benefit). However, this tax credit is barely targeted: more than 90% of employees benefit from the scheme. Consequently, conducting empirical studies on its impact is tricky given the absence of a control group.

This tax credit only applies to labour income (i.e. pensioners are not entitled to it).[a] It increases as monthly income rises, reaching a maximum limit of roughly €3,250 per month (gross taxable income, after base deduction), and is not offered to individuals with a monthly income of €14,490 or higher. The maximum tax reduction – at intermediate level – is about €270 per month.

Chart 2: Tax credit amount (SEK/month) in 2023, based on gross monthly income



Source: The Swedish Tax Agency (Skatteverket).

a. Even though the earned income tax credit cuts tax on the portion of income on which only local tax is levied, local tax revenue is not affected as the earned income tax credit scheme is financed by the central government budget.

3.2 A moderate level of social security contributions, offset by payroll tax

The first pillar of the pension scheme is sustained by the 17.21% social security levy on gross wages, 10.21% of which relate to employers' social security contributions and 7% to employees' social security contributions. In 2000, employees' contributions to the basic pension system became partially deductible, and became increasingly deductible over time, reaching a point of near-full deductibility in 2006. This tax relief scheme was a major factor in the drop in the tax revenue to GDP ratio between 2000 and 2021 (the loss in revenue was equivalent to 2.5% of GDP in 2021).

The portion of net social security contributions to the general government budget is limited compared to the EU level (7.2% of GDP, just under half of which is allocated to pensions, see Table 1). There are several factors behind this modest ratio: (i) the significant portion that is the second pillar of the pension system (nearly 40% of contributions, that are not recognised in aggregate tax and social security contributions); (ii) financing of the basic (guaranteed) pension by the central government budget; (iii) deduction of virtually all employee social security contributions for pensions; and (iv) the fact that healthcare is the responsibility of regional governments, which finance most of the related costs (employers' contributions to healthcare insurance, at 3.55%, only cover a little more than 10% of expenses).

However, the taxation of the labour factor is weighed down by a general contribution on salaries that offers no compensation in return. This "payroll tax" (see Box 2), which is very broad in scope given the revenue it generates (5.2% of GDP in 2021), seemed to be unique to Sweden. In addition, beyond the social security ceiling (SEK 46,438/month), the pension contributions levied do not generate entitlements but rather go into the general budget.

Box 2: General payroll tax

Payroll tax (*Allmän löneavgift*) is levied on gross wages but does not generate entitlements and is not linked to any insurance system: the proceeds go directly into the central government budget. Payroll tax was originally instituted at a rate of 1.5% to finance the cost of EU accession and has been gradually increased to stand at 11.62% in 2023. Together with this so-called "general" contribution, the overall employers' contribution rate – which does not include contributions to the second capitalisation pillar – is 31.42% for a salaried employee (28.97% for a self-employed worker, see Table 3).

Table 3: Rate of employers' social security contributions in 2023 (%)

	Payable by employer	Self-employed workers
Pensions	10.21	10.21
Survivor's pension	0.60	0.60
Health insurance	3.55	3.64
Work-related accidents and occupational diseases	0.20	0.20
Parental benefits	2.60	2.60
Unemployment	2.64	0.10
Payroll tax	11.62	11.62
Total	**31.42**	**28.97**

Source: Eurostat, the Swedish Tax Agency (Skatteverket) and Stockholm Regional Economic Department calculations.

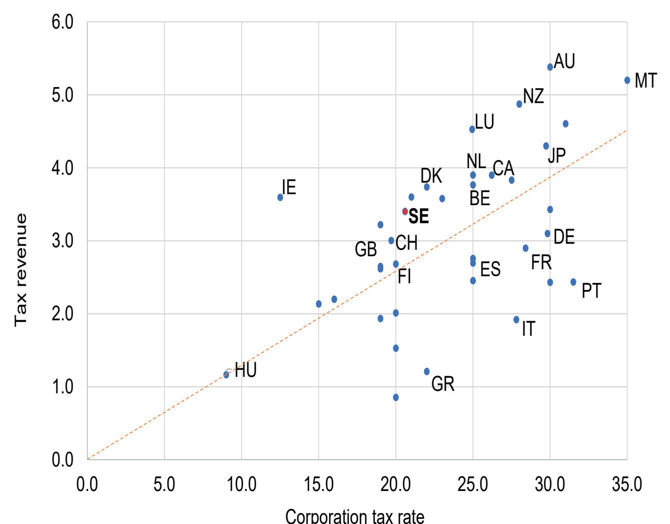
4. Taxation designed to maintain the competitiveness of businesses

4.1 A strategy that opts for a broad tax base

Businesses enjoy a relatively favourable tax environment, with corporate income taxes set at 20.6% (since 1 January 2021), the same as the average EU rate and about two points below the OECD country average. This rate has been lowered step by step since the 1991 reform (the nominal rate was over 60% before the reform, with however much lower effective rates of 30% in 1991, 28% between 1994 and 2008, etc.). The long-term strategy of broadening the tax base and eliminating tax loopholes has helped to optimise tax revenue (see Chart 3).

Since 1991, income from capital (securities, dividends, capital gains and certain types of property income) is subject to a 30% flat-rate tax called kapitalskatten (capital duty). Exemptions from this flat-rate tax are granted for: (i) income from dividends of unlisted companies (taxed at 25%); (ii) private property income (taxed at 22%); and (iii) dividends of "close companies",[3] taxed at between 20% and 52% depending on earned income, to act as a deterrent to converting earned income into capital income which is subject to lower taxes.

Chart 3: Corporation tax revenue and rate in 2021



Source: Tax on corporate profits - OECD Data.

Note: The trend line shows the linear regression line that crosses the chart's origin (0, 0).

(3) A "close company" is a limited liability company or an economic association in which no more than four shareholders hold shares representing over one half of the company's votes.

4.2 Households subject to low property and wealth tax

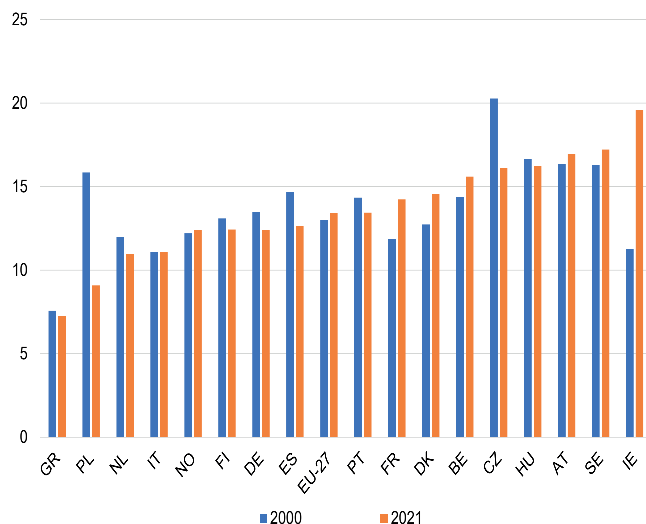
Sweden scrapped inheritance and gift tax in 2005, and wealth tax in 2007. Property tax for individuals was rolled back in 2008 and replaced with an annual council charge capped at €840 for houses (or alternatively 0.75% of their taxable value) and at €145 for apartments (or 0.3% of their taxable value).

5. The impact of the 1991 tax reform on investment and employment

5.1 A high level of business investment

Assessing the effect of the 1991 reform on Sweden's economic performance, in particular the decline in capital taxation, is a difficult task, but a number of papers[4] have shed light on the long-term positive impact expected on economic growth and investment thanks to capital-labour substitution. The stylised facts seem to be in line with this theoretical analysis, with the investment rate of Swedish businesses being one of the highest in the EU (see Chart 4).

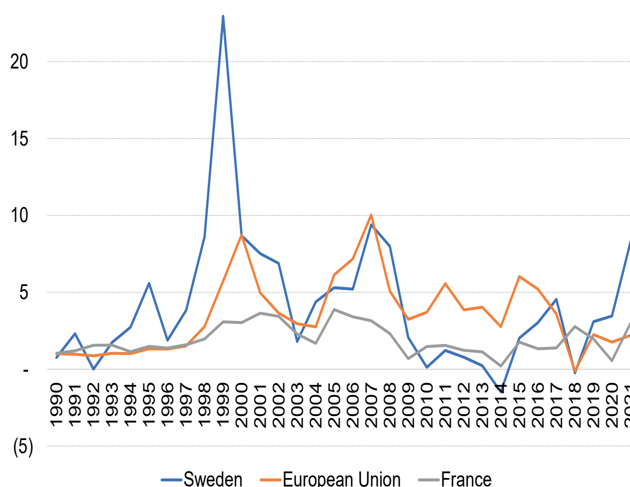
Chart 4: Total investment in the business sector in 2000 and 2021 (as a % of GDP)



Source: Eurostat.

In addition, FDI inflows experienced a surge during the 1990s shortly after this reform (see Chart 5), a period which also saw the deregulation and opening up of network industries, a move that made Sweden a trailblazer in the EU. The post-banking crisis period in the early 1990s also coincided with the increase in total factor productivity which continued into the mid 2000s, with average annual growth of approximately 1.5%, similar to that of the United States.

Chart 5: Net FDI inflows (as a % of GDP)



Source: World Bank.

5.2 High levels of structural unemployment

For a long period of time, Sweden's unemployment rate has been high (7.5% in 2022), particularly when compared to the figures of other Nordic countries. International organisations such as the OECD and the IMF posit that this is due to difficulties for members of the workforce born abroad to enter the labour market and to high levels of employment protection. The 1991 tax reform had a significant positive impact on stimulating labour supply by lowering tax for the highest income brackets. Miao, Selin and Söderström's[5] empirical study corroborates this impact on labour supply based on an analysis of changes in the earned income tax credit. It would appear that the tax credit contributes to the high labour force participation rate in Sweden (83% for 15-64 year olds, one of the highest rates out of the OECD countries). At the same time, a general payroll tax – the rate of which has been continually raised – has considerably expanded the tax wedge on labour and has brought up structural unemployment.

(4) IFO Institute (2019), «The Economic and Fiscal Consequences of a Capital Income Tax Reduction in Sweden».
(5) D. Miao, H. Selin and M. Söderström (2022), «Earnings responses to even higher taxes», *IFAU Working Paper Series* 2022: 12.

5.3 Taxation plays a minor role in redistribution, with a low level of primary income inequality

Sweden has one of the lowest levels of income inequality in the EU. The Gini coefficient, which measures the deviation from the equal distribution of income, was only 0.27 in 2019 after taxes and transfers according to the OECD, compared to 0.30 for France and Germany and 0.39 for the United States. However, in Sweden, income disparities are already low from the point of primary income distribution (before taxes and transfers), at 0.36 compared to 0.40 for Germany and 0.44 for France. This proves that redistribution does not play a significant role in Sweden. In addition, the decline in the Gini coefficient is largely the result of transfers and levies contributing very little to the index (accounting for roughly one sixth according to the International Labour Office).[6] This observation is in line with the combination of a high level of indirect taxation and a dual system of income taxation with an attractive capital tax scheme.

(6) See M. Luebker (2011), "The impact of taxes and transfers on inequality", *TRAVAIL Policy Brief* N° 4, ILO, Geneva.

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