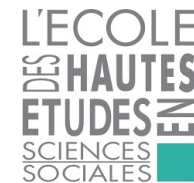


# Income Inequality and Taxation France (1914-2015)

Malka Guillot  
PSE, IPP, EHESS

Fórum International Tributário, SP 2018



# Outline

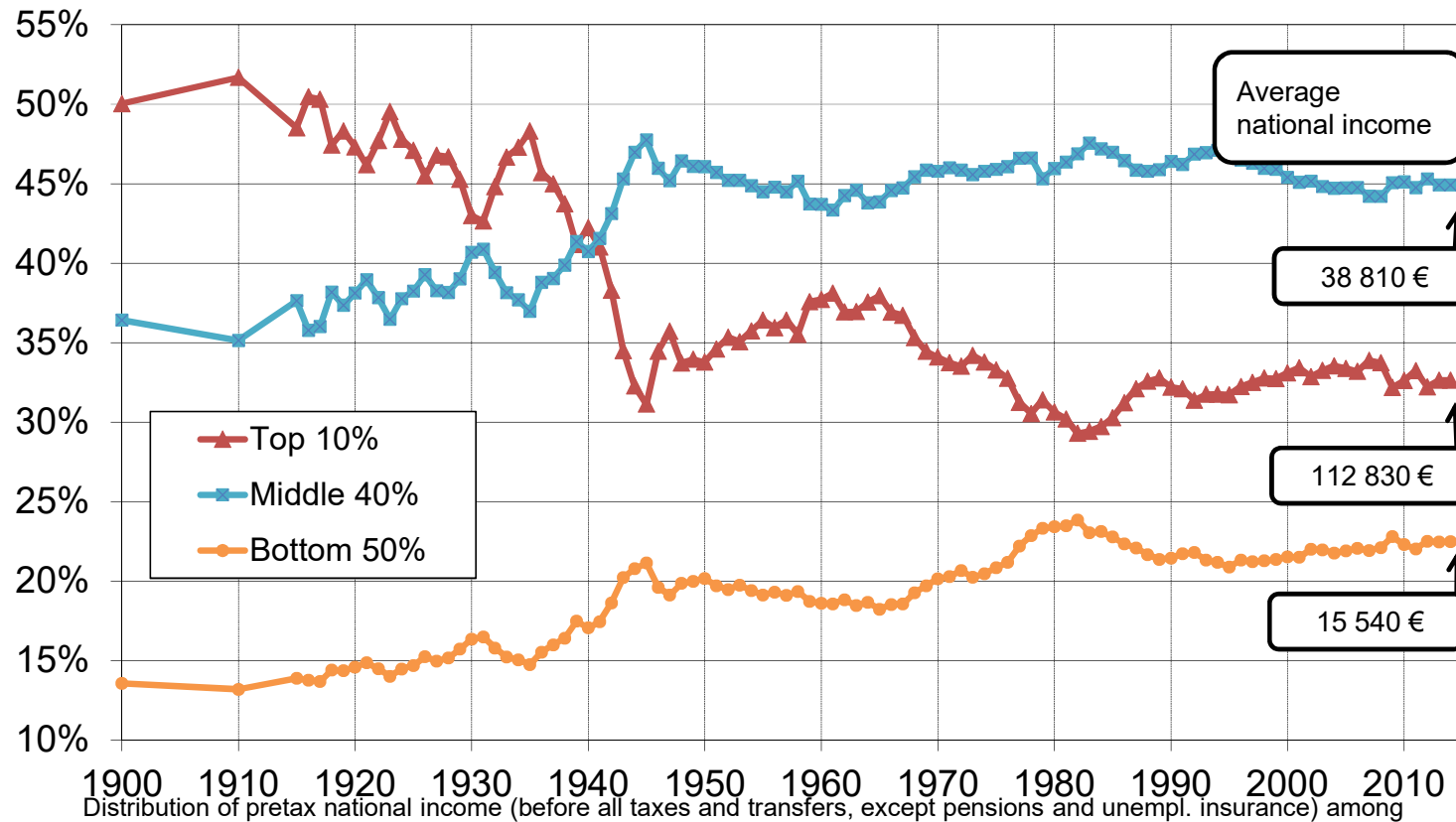
1. Introduction: Income Inequality in France
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# Evolution of Income Inequality in France

Figure 1. Income shares in France (1900-2014)



Source: Garbinti, Goupille and Piketty (2017)

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# Long-Standing History of Taxation in France

**Figure 2.** Crushed by 750 taxes

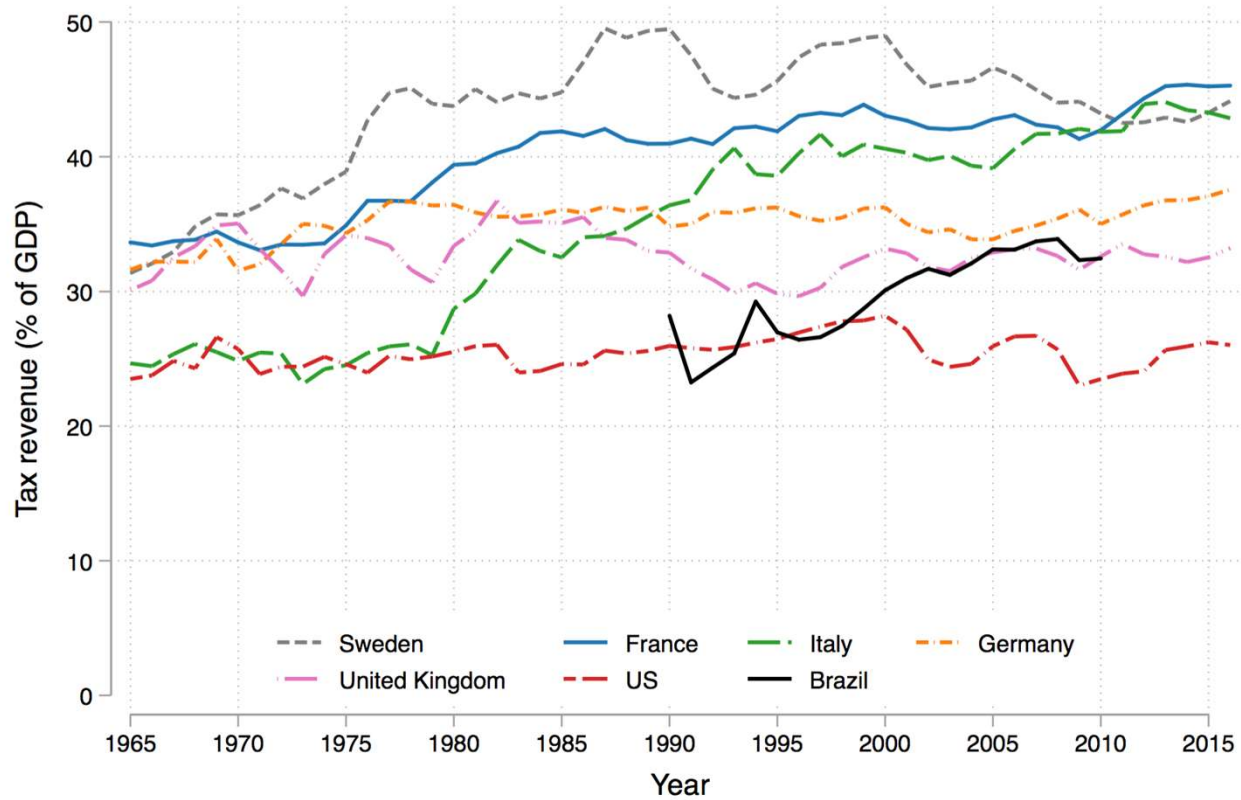


Source: gallica.bnf.fr / Bibliothèque nationale de France

Source: National Library, 1799

# High Level of Tax Revenue

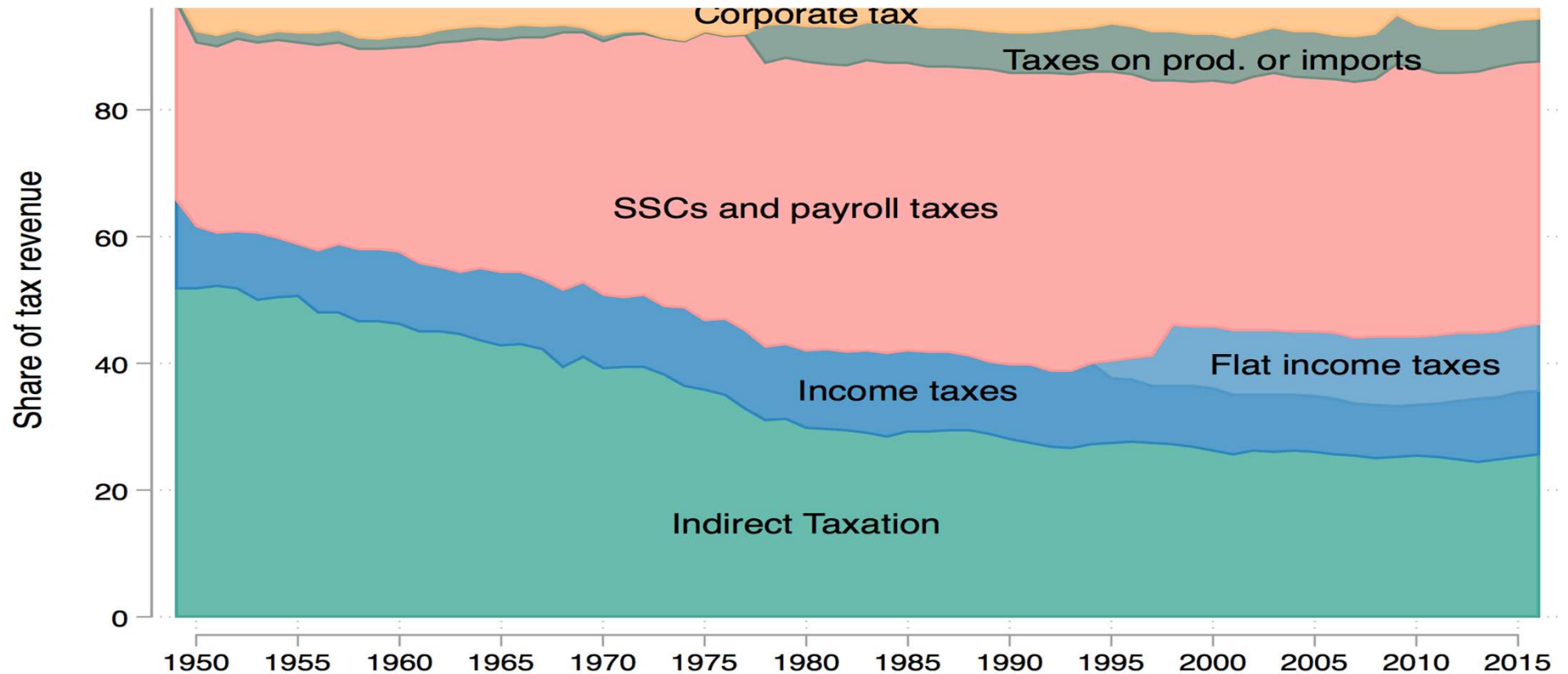
**Figure 3:** Tax revenue as a share of GDP (1965-2016)



Source: OECD.

# Important Weight on Labour Taxation

Figure 4: Tax revenue as a share of GDP (1965-2016)

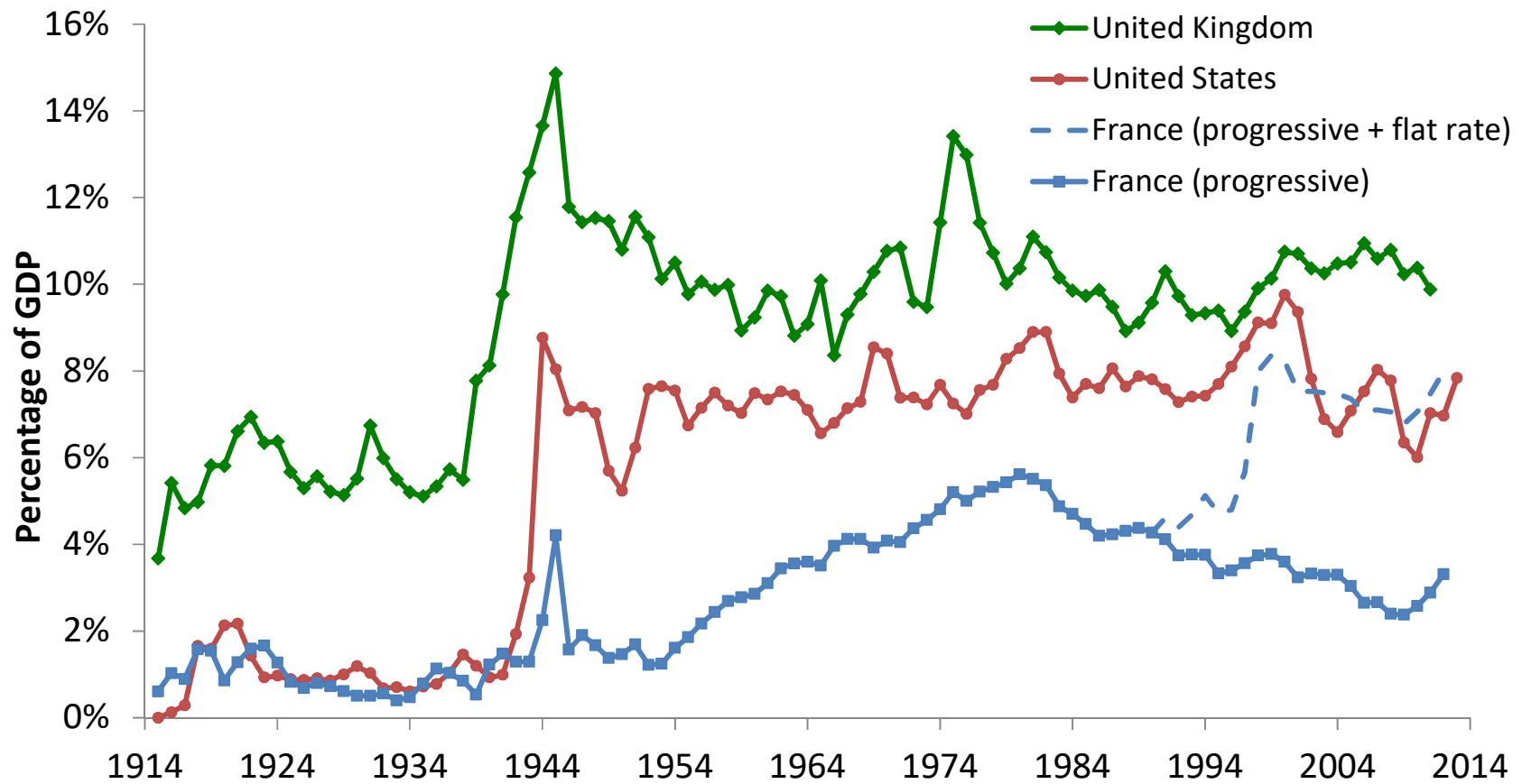


Source: OECD.



# Comparison with UK and US: income tax

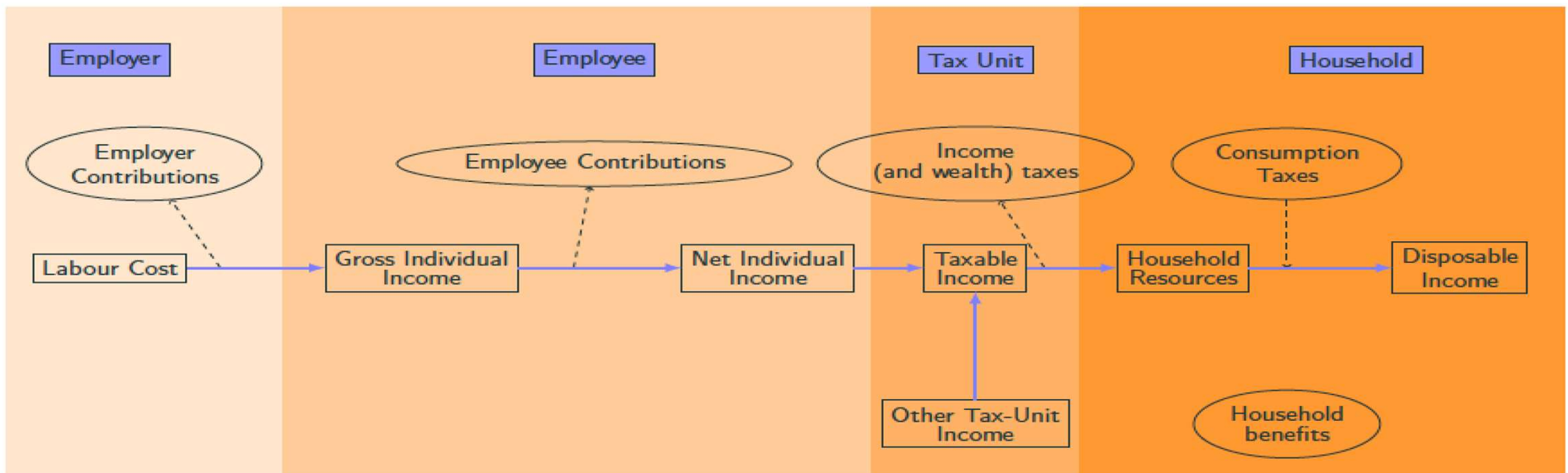
Figure 5: Share of income tax of income tax revenue in GDP (France, USA, UK)



Source: André and Guillot (2014).

# Taxation: Individual Perspective

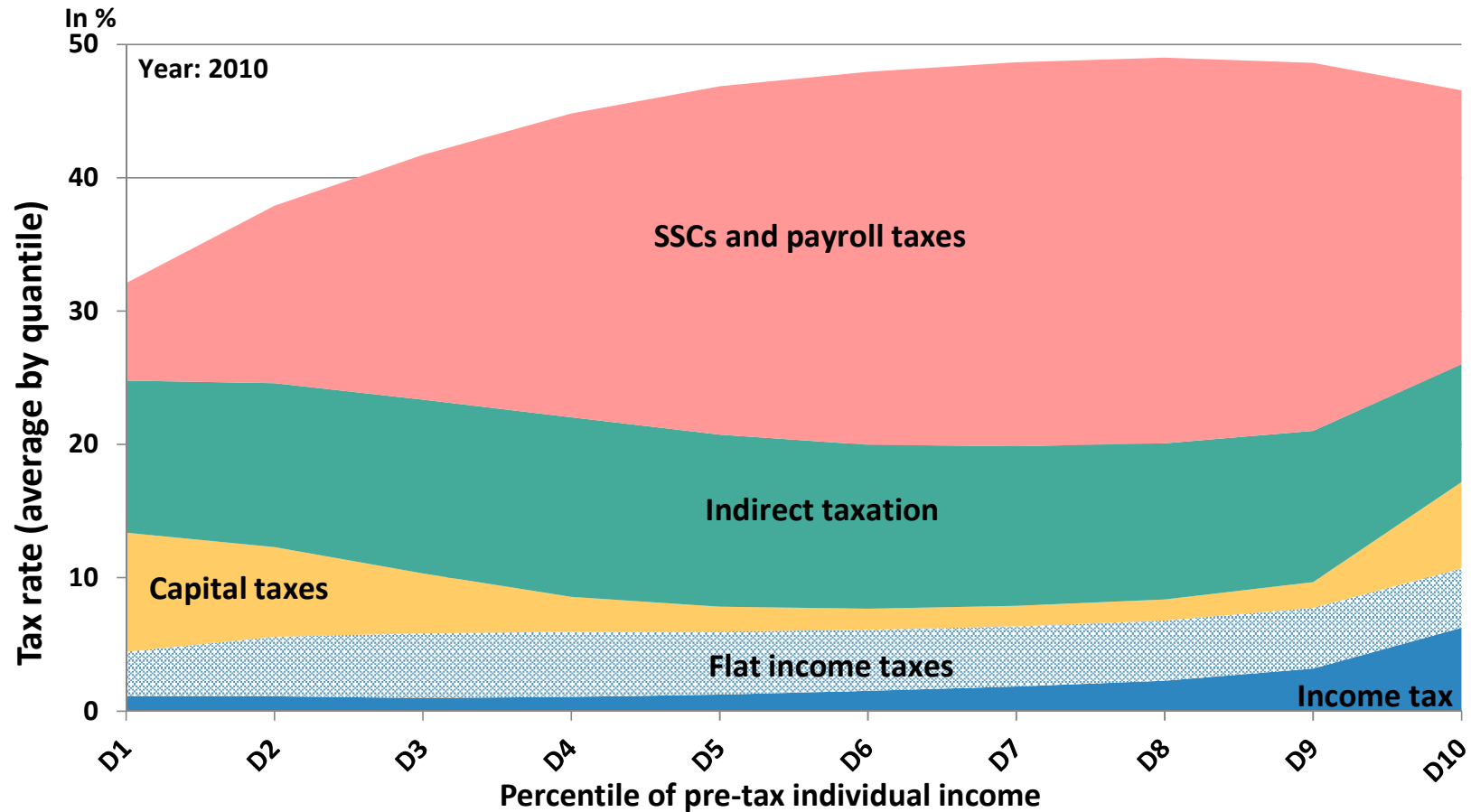
Figure 6: Illustration of main wage concepts



Source: OECD.

# Redistributive Impact of Taxes

Figure 7: Decomposition of tax revenue by income decile (2010)



Source: National Library, 1799

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# Computing the Income Tax (IT)

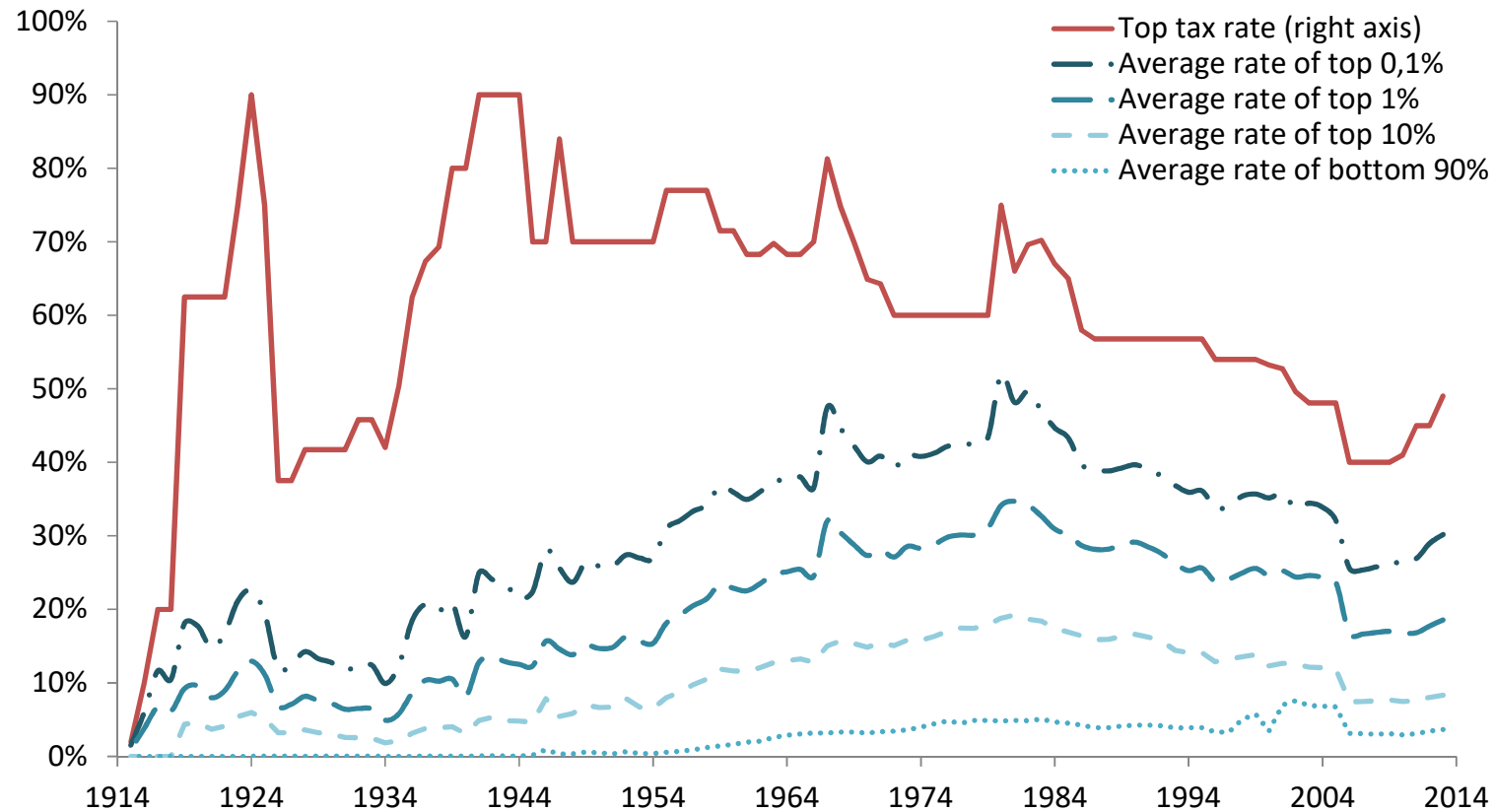
- Tax base  $\mathbf{y}$ : aggregation of incomes with many deductions
- Income tax ( $\mathbf{IT}$ ) computed by multiplying the  $\mathbf{y}$  by the number of tax unit  $\mathbf{k}$ :
  - $\mathbf{IT} = \mathbf{k} \cdot \mathbf{T}(\mathbf{y}/\mathbf{k})$
  - $\mathbf{T}()$  is the tax schedule
- The larger  $\mathbf{k}$  is, the lower  $\mathbf{IT}$  is for a given  $\mathbf{y}$
- This advantage is ceiled
- Reductions and tax credits can reduce  $\mathbf{IT}$

# Peculiarities of the French Income Tax

- Joint household taxation
- The tax schedule play a key role, but its impact is undermined by the reductions and tax credits
  - Numerous tax loopholes that decrease the progressivity of the tax schedule
- A mechanism controlling for the number of household with positive income tax liability (Décote)

# Effective Income Tax Rates

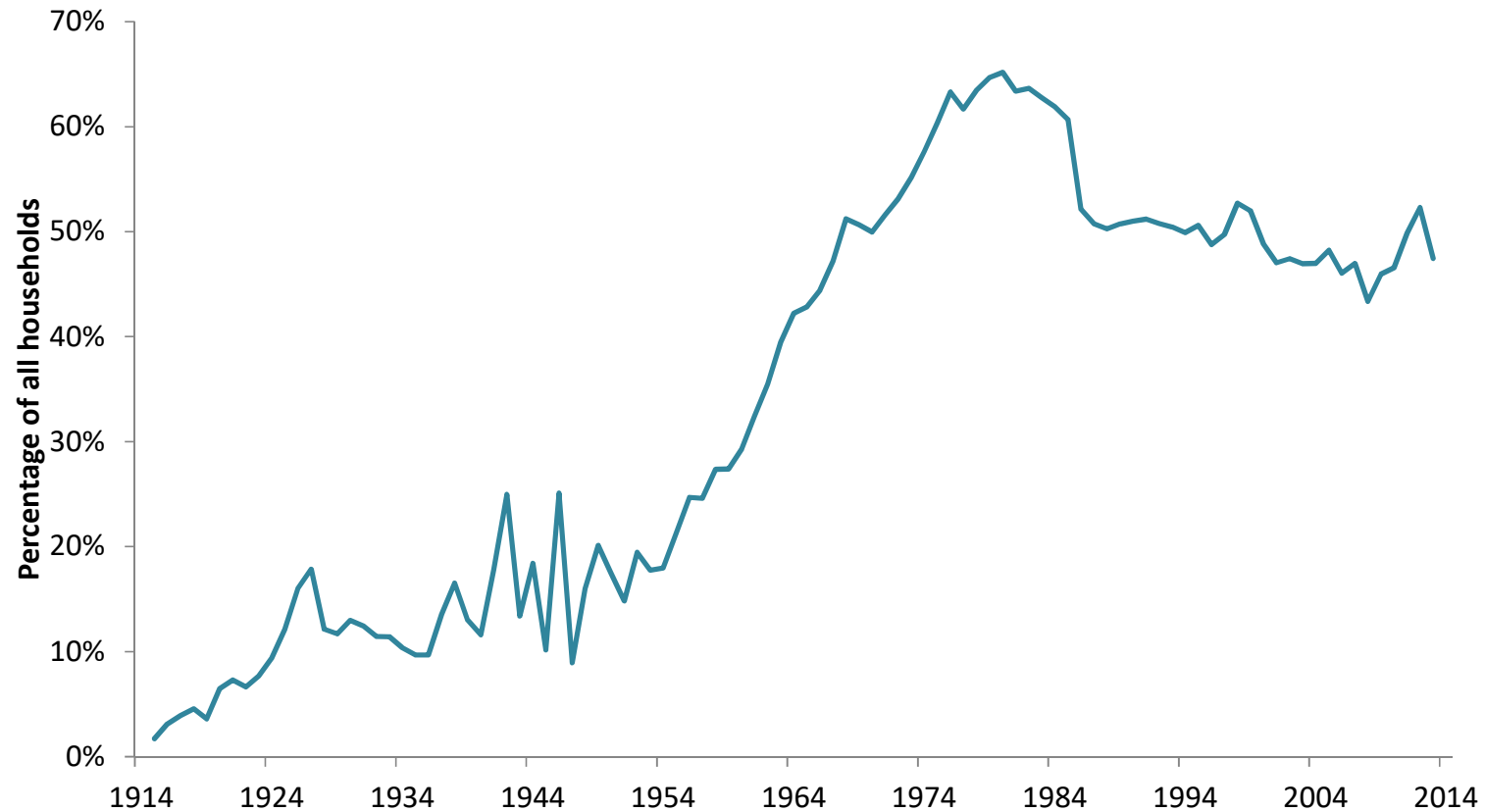
**Figure 8.** Evolution of income tax rates (1914-2014)



Source: André and Guillot (2014)

# Who Paid the Income Tax?

**Figure 9.** Fiscal households subject to the income tax

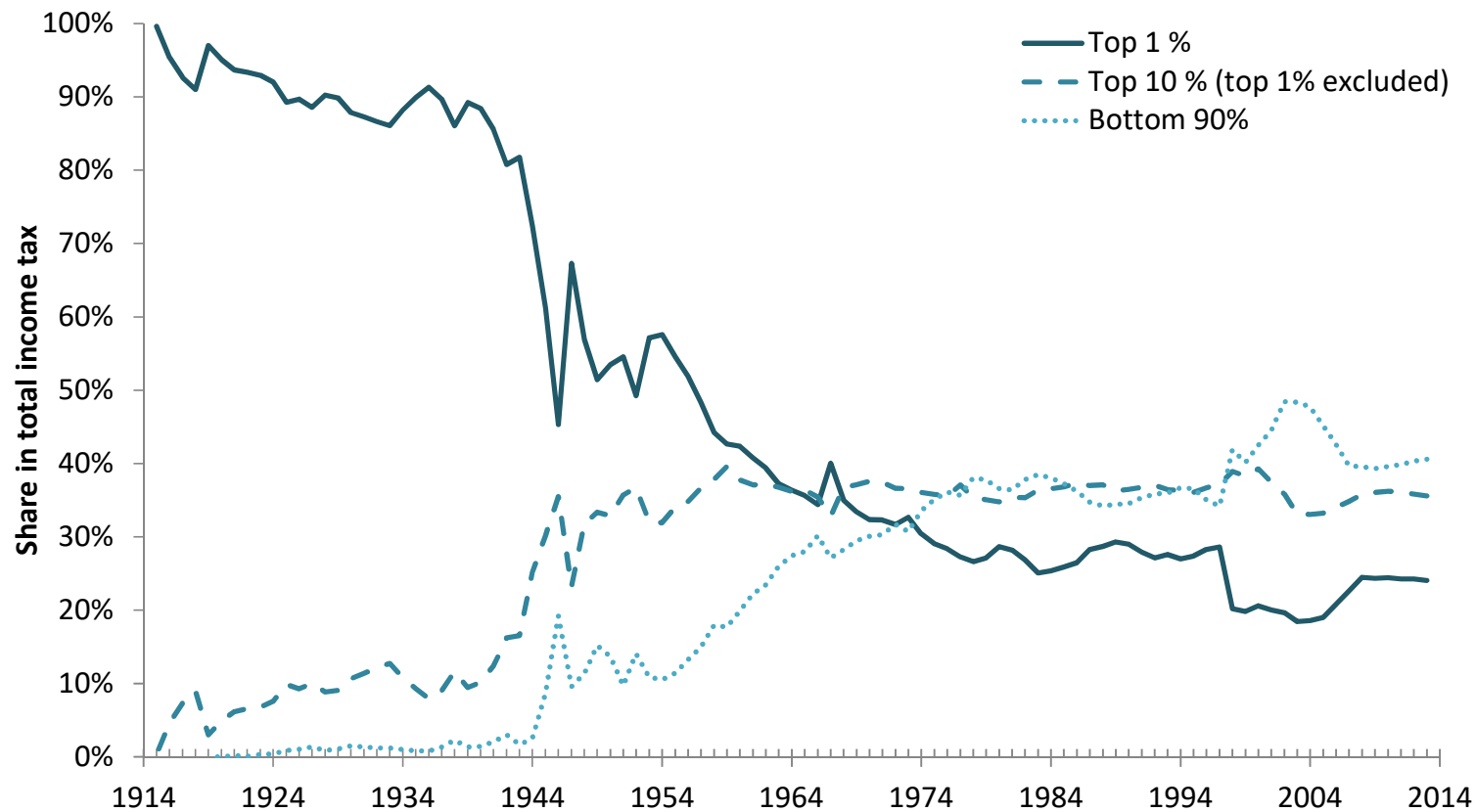


*Source:* André and Guillot (2014)



# Who Paid the Income Tax?

Figure 10: Paid income tax by income category



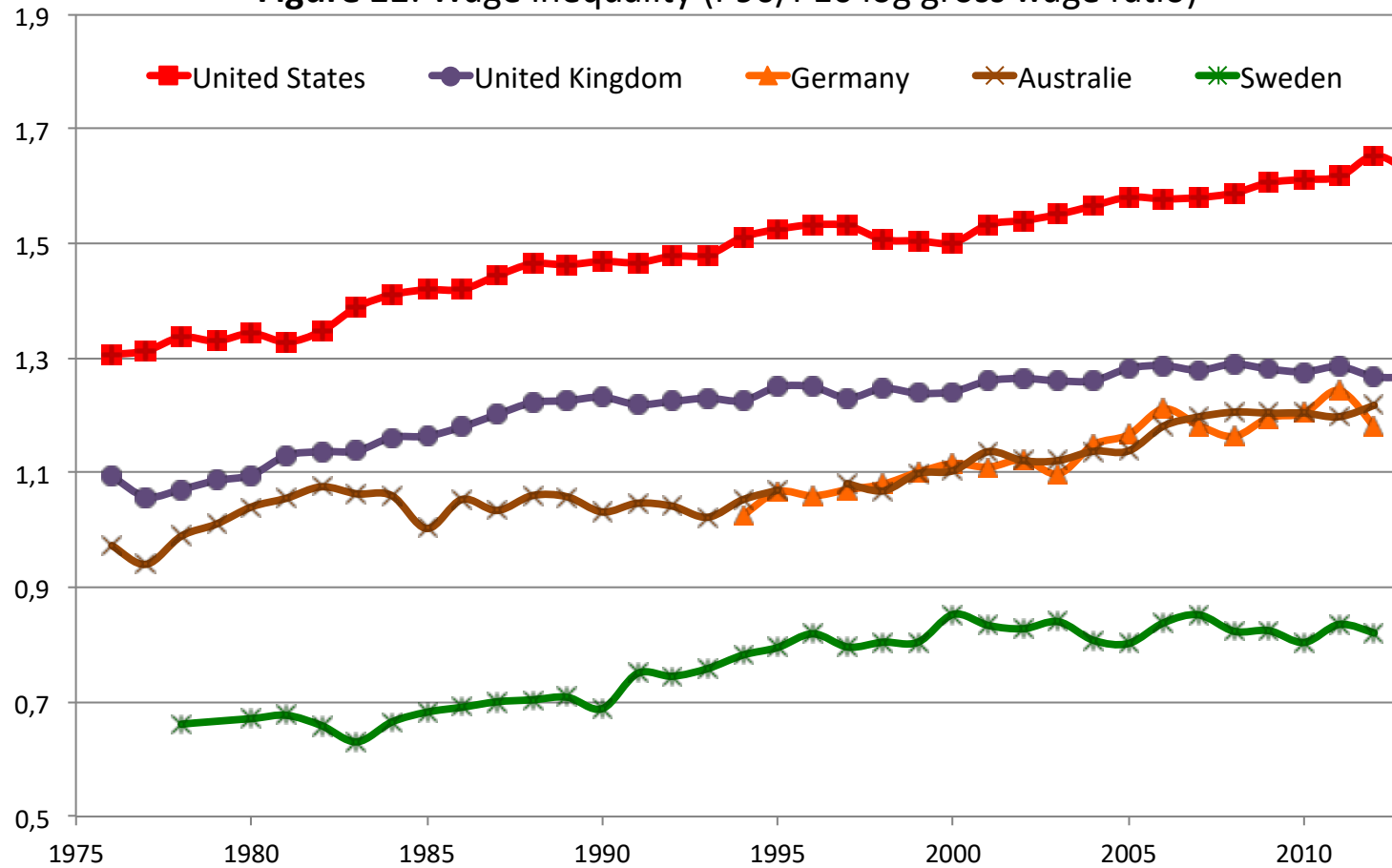
Source: André and Guillot (2014)

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# Increase in Wage Inequality...

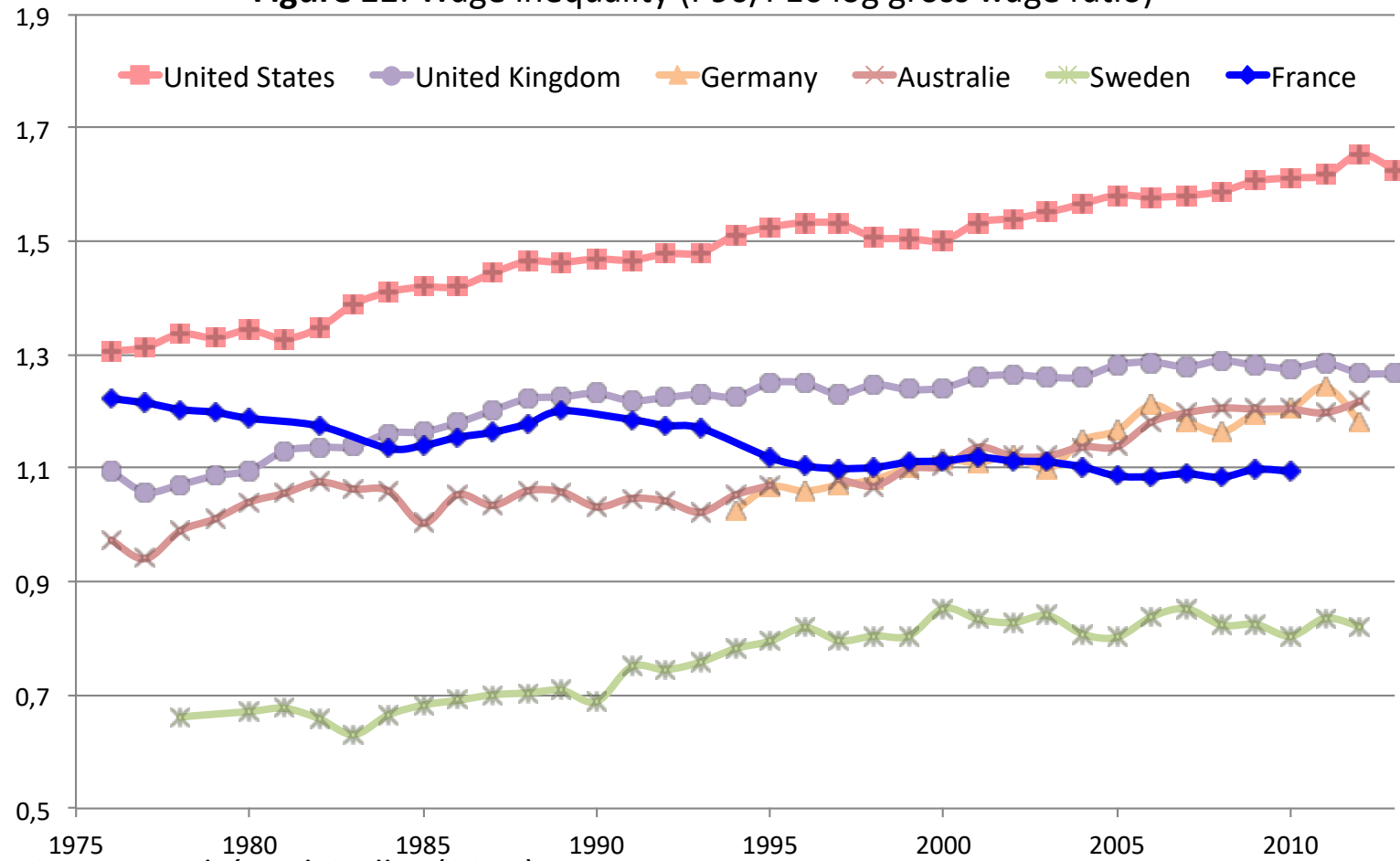
Figure 11: Wage inequality (P90/P10 log gross wage ratio)



Source: André and Guillot (2014)

# ... Except for France

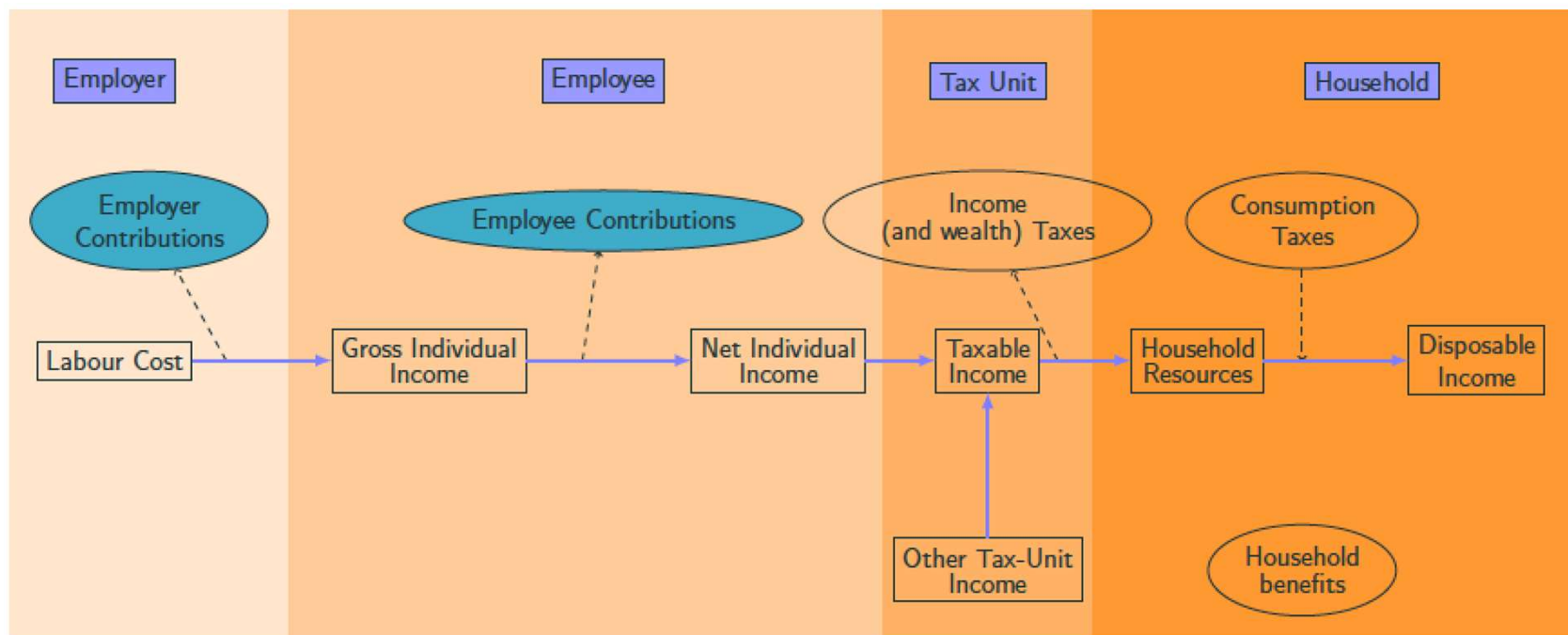
Figure 11: Wage inequality (P90/P10 log gross wage ratio)



Source: André and Guillot (2014)

# Taxation: Individual Perspective

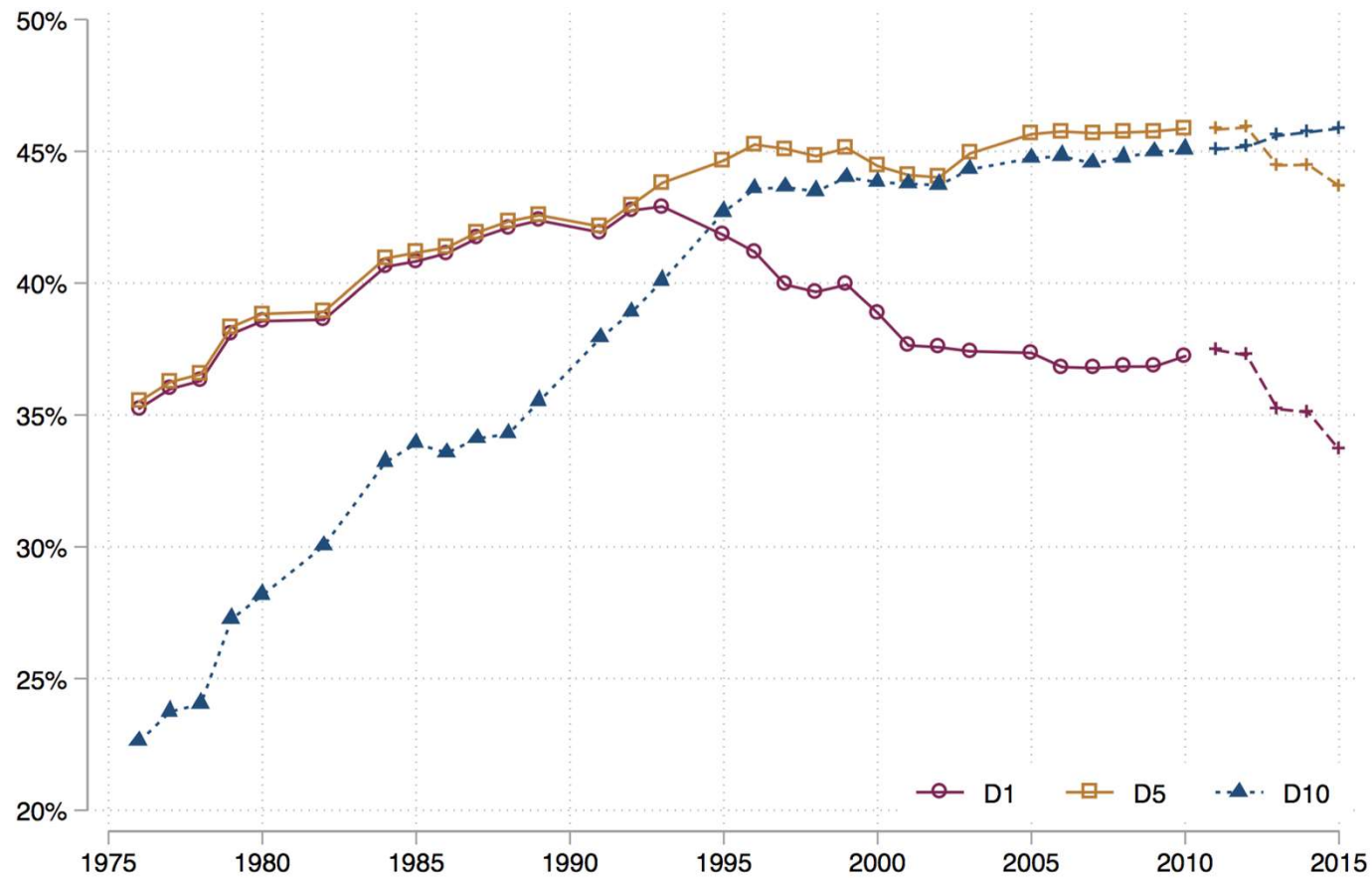
Figure 12: Illustration of main wage concepts



- SSCs represent:
  - 41% of tax revenue in France (2016)
  - 26% of tax revenue in Brazil and OECD average (2010)

# Social Security Contributions (SSCs)

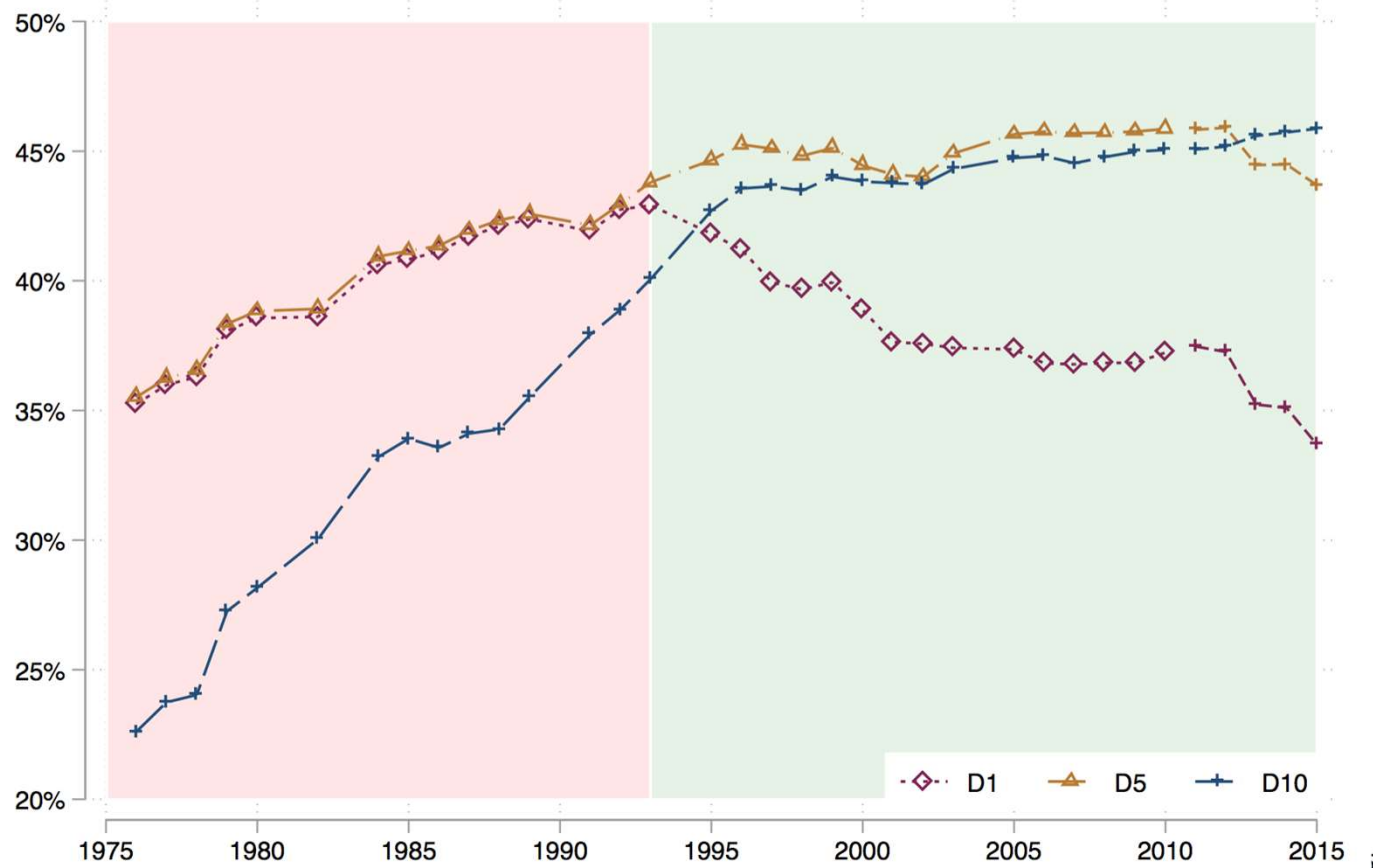
Figure 13. Total SSCs as a fraction of labour costs (by decile)



Source: Bozio, Breda and Guillot (2016)

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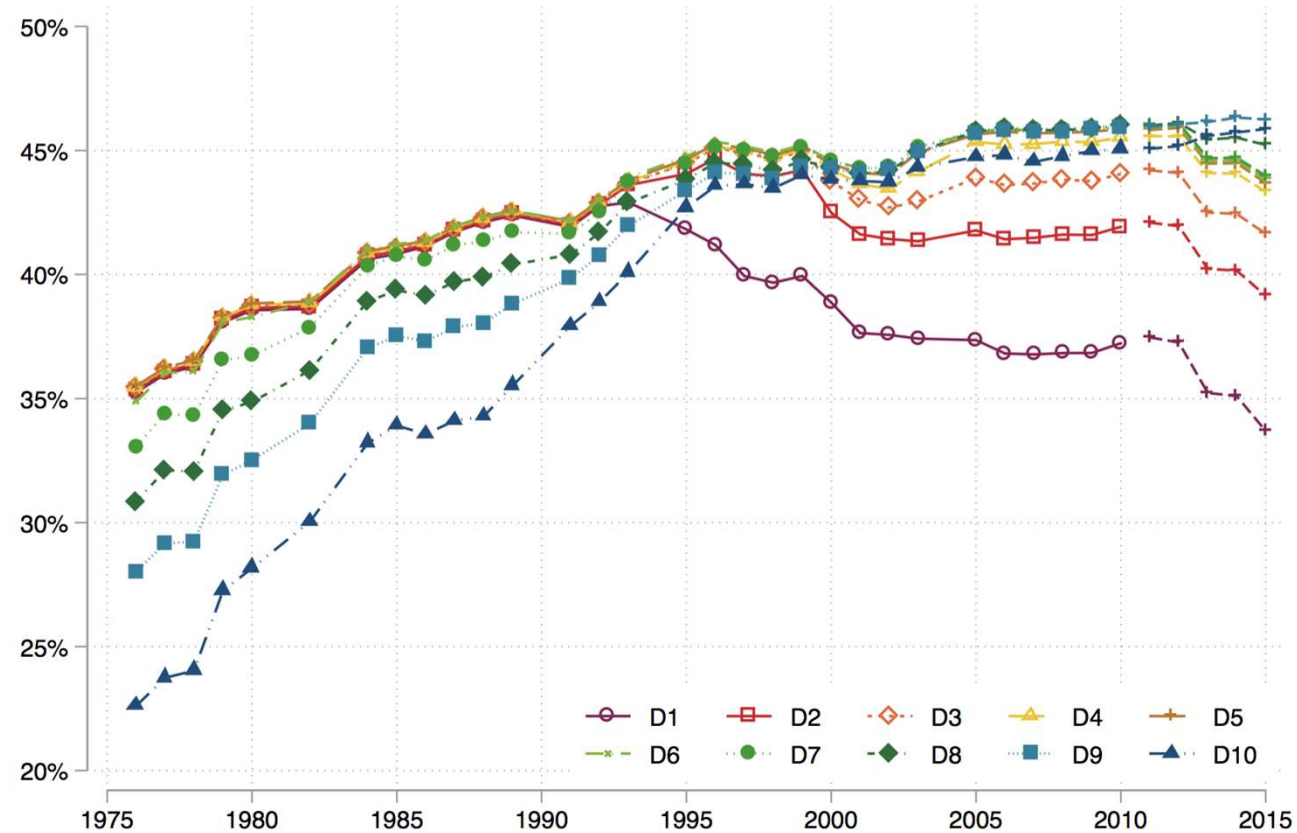
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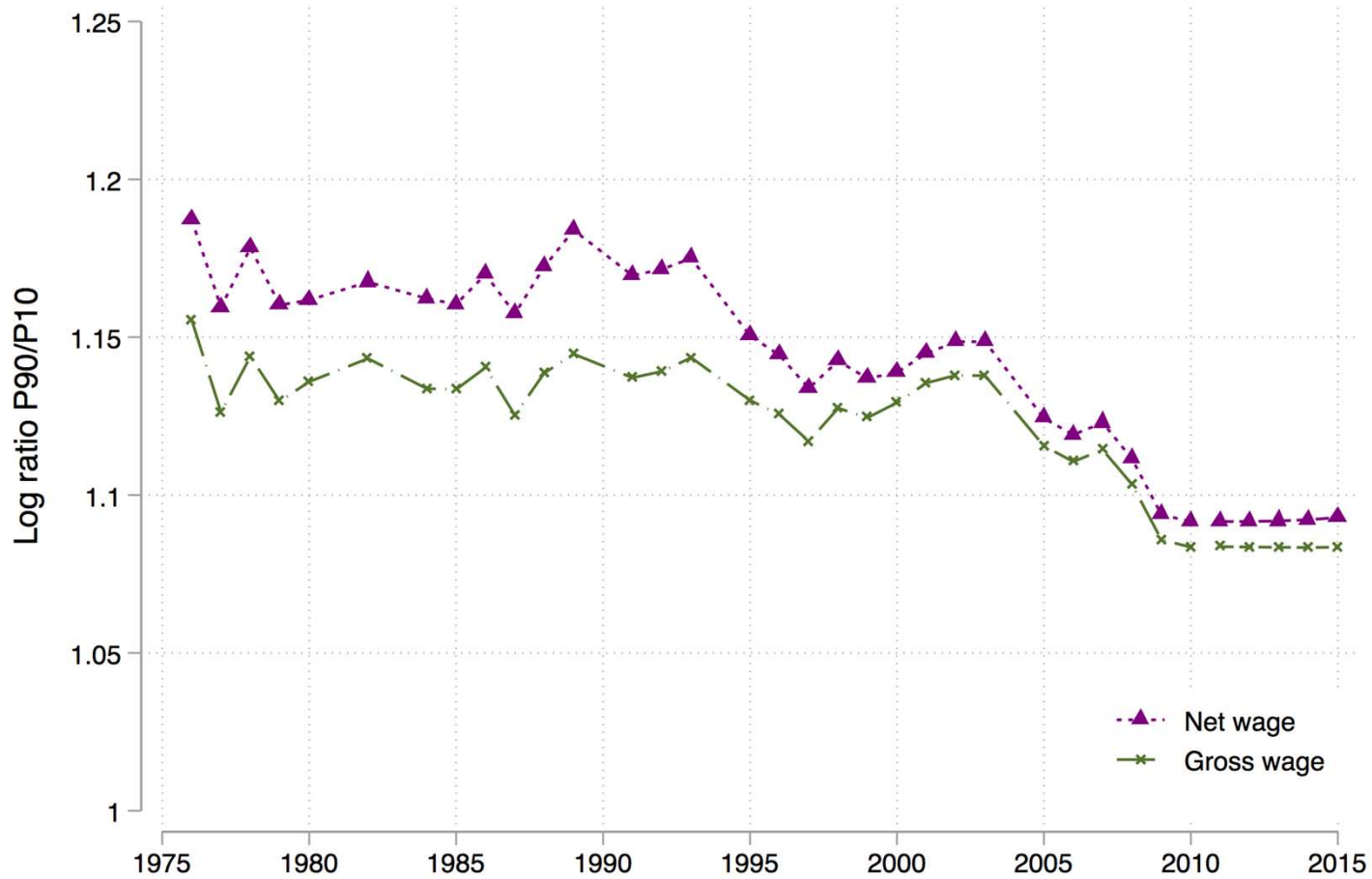
5 ;

Source: Bozio, Breda and Guillot (2016)



# Wage Inequality: 3 measures

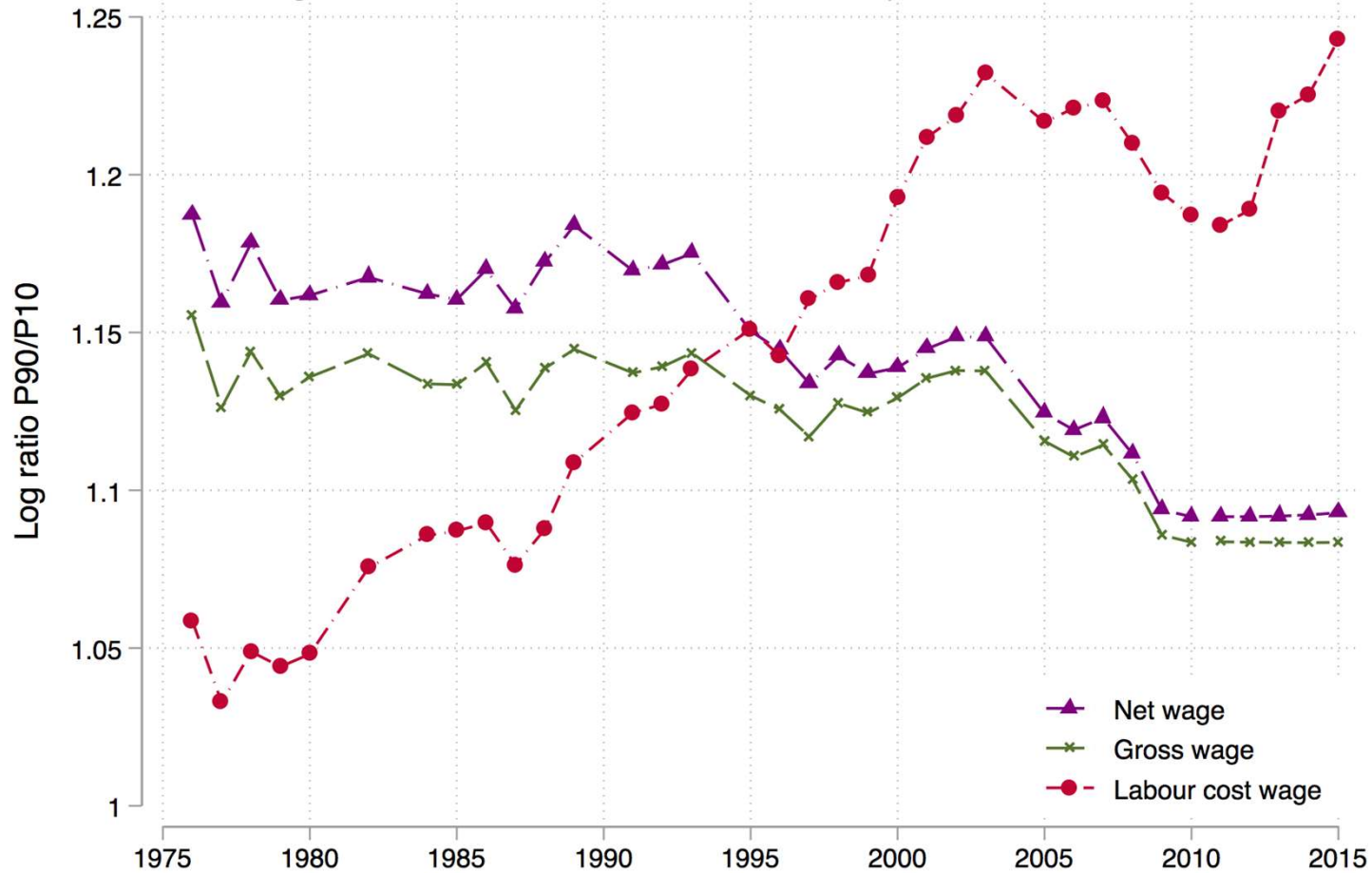
Figure 14. P90-P10 ratio, full-time full-year male workers



Source: National Library, 1799

# Wage Inequality: 3 measures

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Source: National Library, 1799

# Wage Inequality: international comparison

**Table 1.** Changes in P90/P10 by country, 1980-2010.

	1980	1990	2000	2010	% change, 1980-2010
Poland	2.81	2.88	3.56	3.96	0.33
U.S.	3.83	4.34	4.49	5.01	0.20
Sweden	1.96	1.99	2.35	2.23	0.20
U.K.	2.99	3.43	3.46	3.58	0.16
Australia	2.83	2.81	3.01	3.33	0.16
<b>France labour cost</b>	3.00	3.14	3.32	3.46	<b>0.13</b>
Finland	2.47	2.49	2.41	2.52	0.02
Japan	3.00	3.16	2.97	2.96	-0.01
<b>France net wage</b>	3.28	3.30	3.04	2.99	<b>-0.08</b>

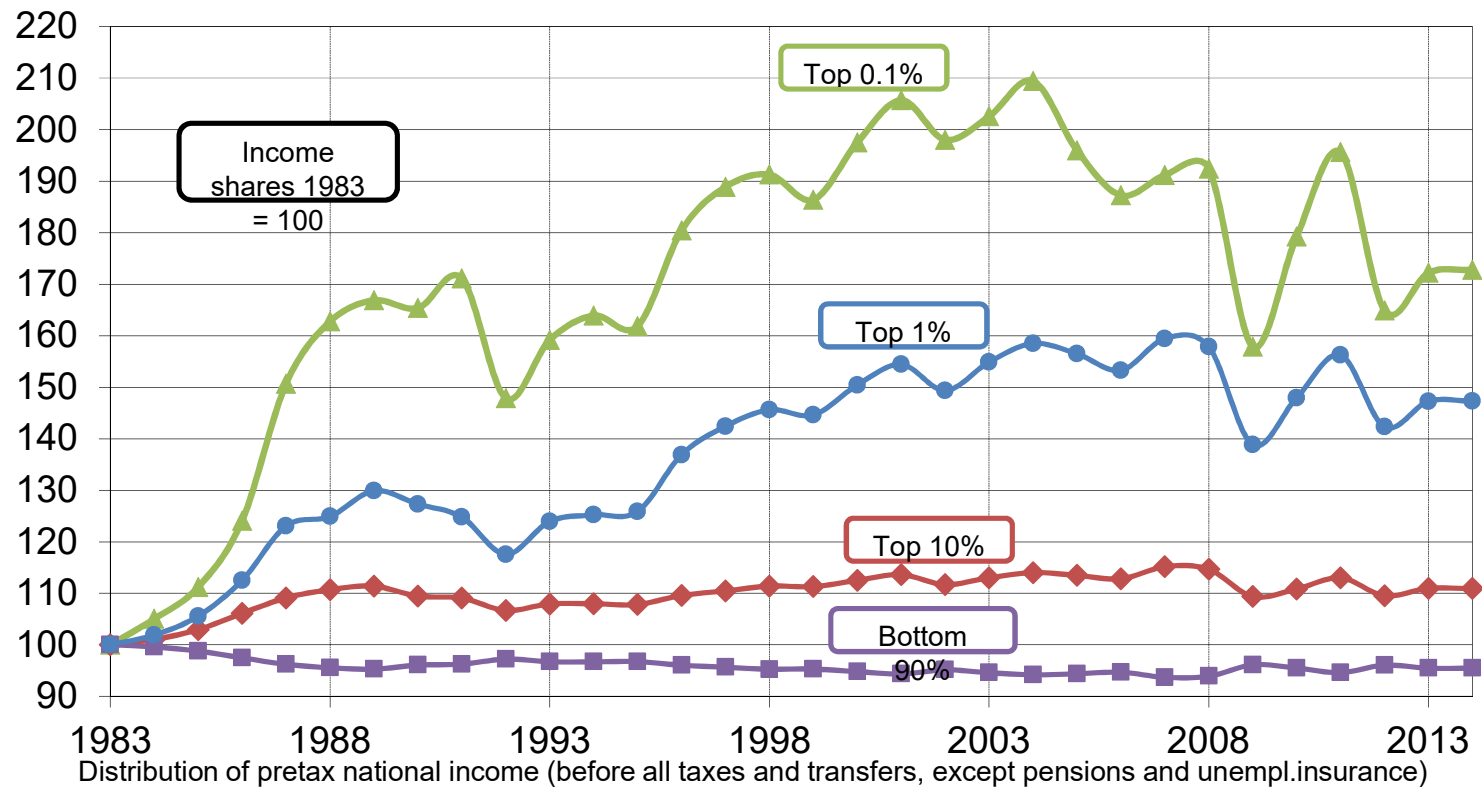
*Source:* Bozio, Breda and Guillot (2016)

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# Inequality at the Top

Figure 15: Rising top income inequality in France, (1983-2014)



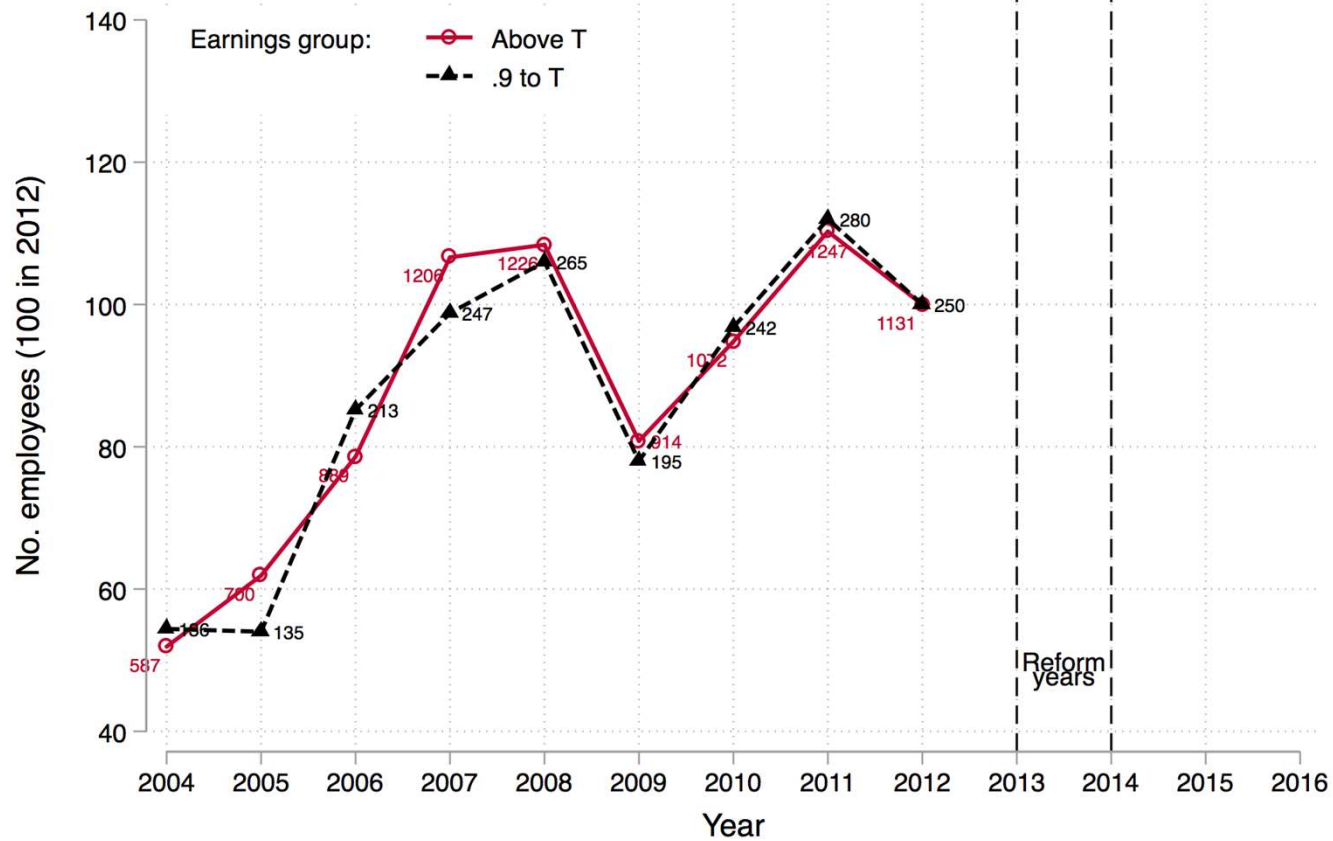
Source: Garbinti, Goupille and Piketty (2017).

# The 75% tax on millionnaires

- A **case study** on top labour incomes taxation
- **Motivation:**
  - Growing income inequality, rise of the “working rich”
  - Top marginal tax rates are very diverse across time and space
  - Differences in labour and capital tax rates at the top
- **Reform:** French “75% tax” on wage earners with gross income above €1m in 2013 and 2014.
  - Tax on payroll, born by employers
  - Large change in marginal tax rate: **+11 p.p.t** .

# Response to the 75% tax on millionaires

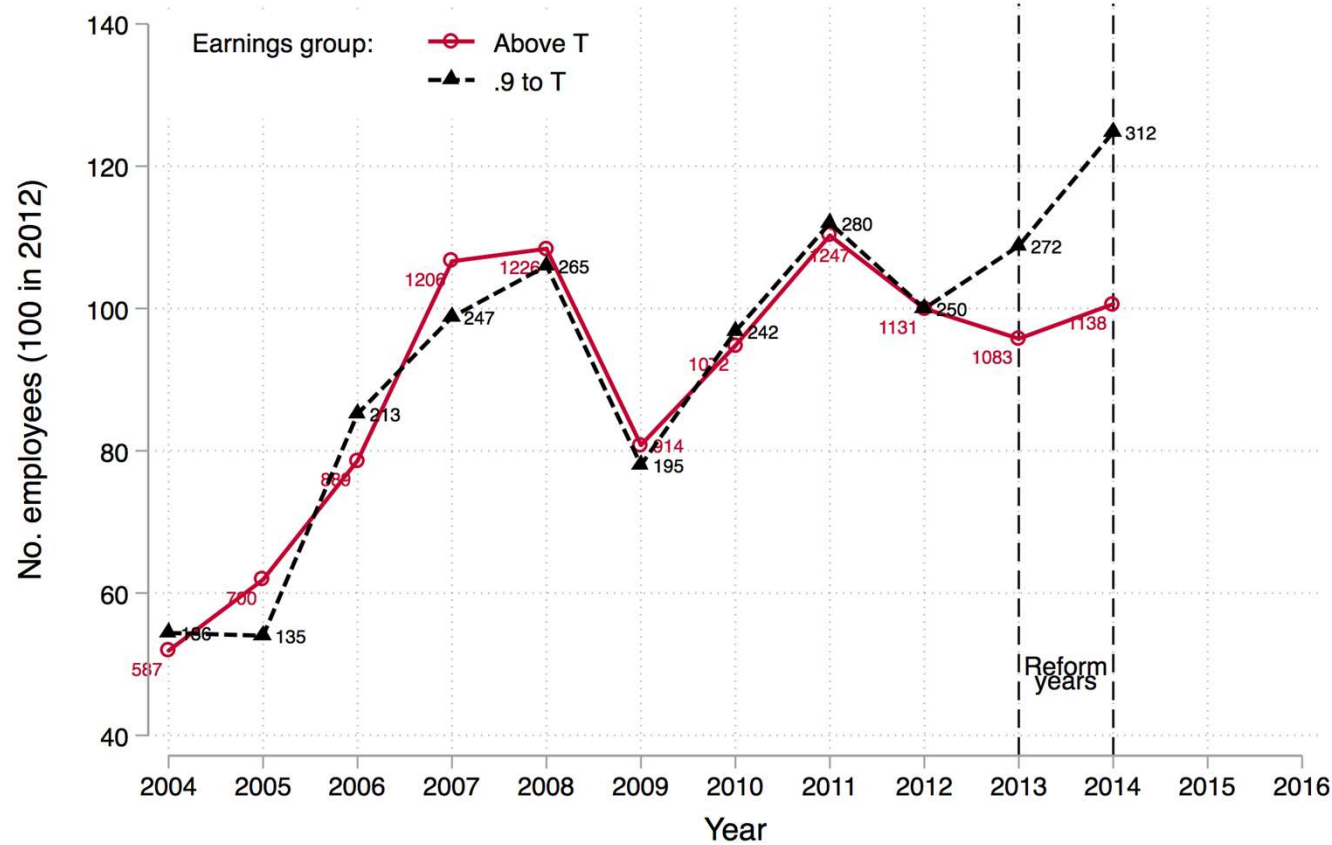
Figure 16: Number of employees in different earnings groups



T=€1m of annual gross wage = €1.309m of annual labour cost.

# Response to the 75% tax on millionaires

Figure 16: Number of employees in different earnings groups

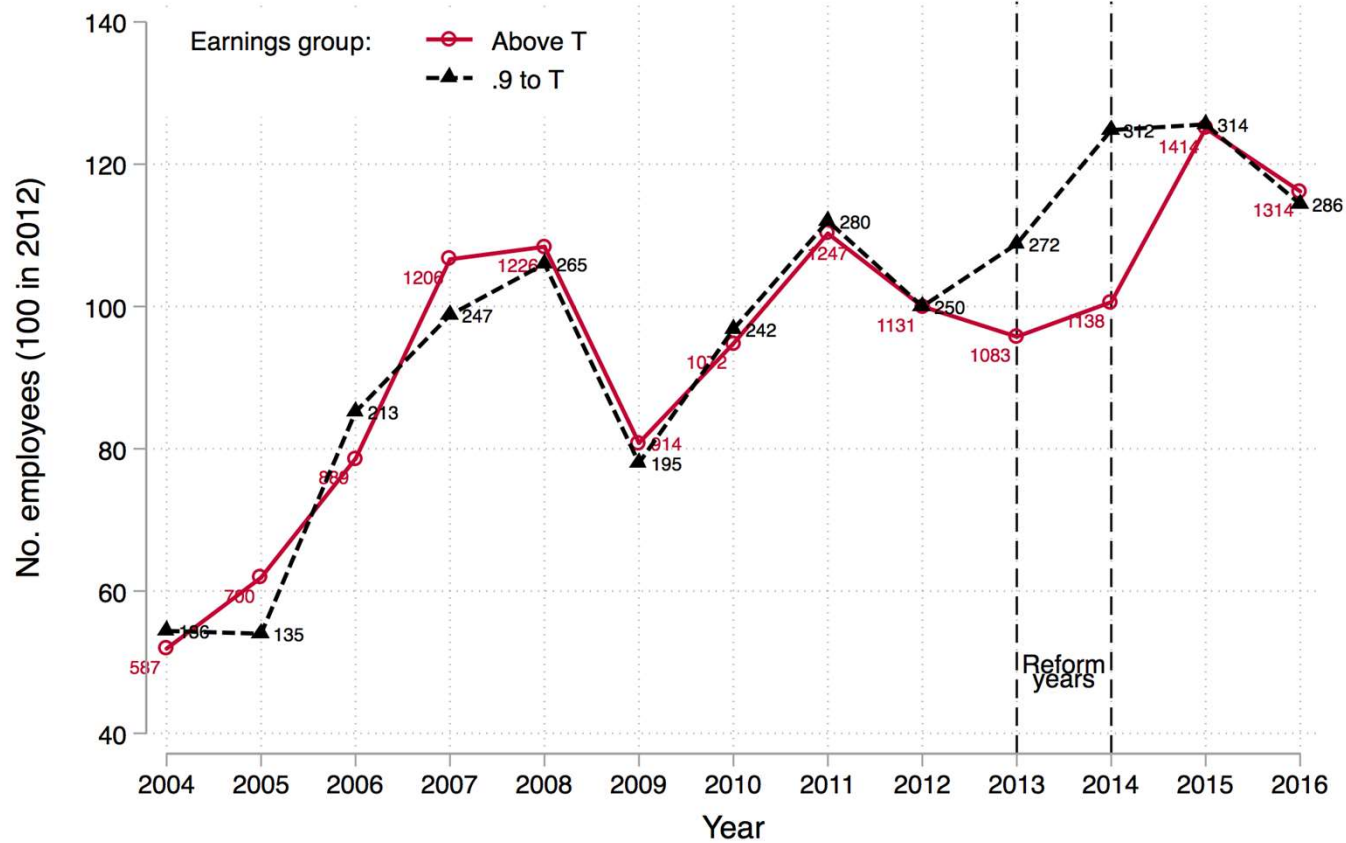


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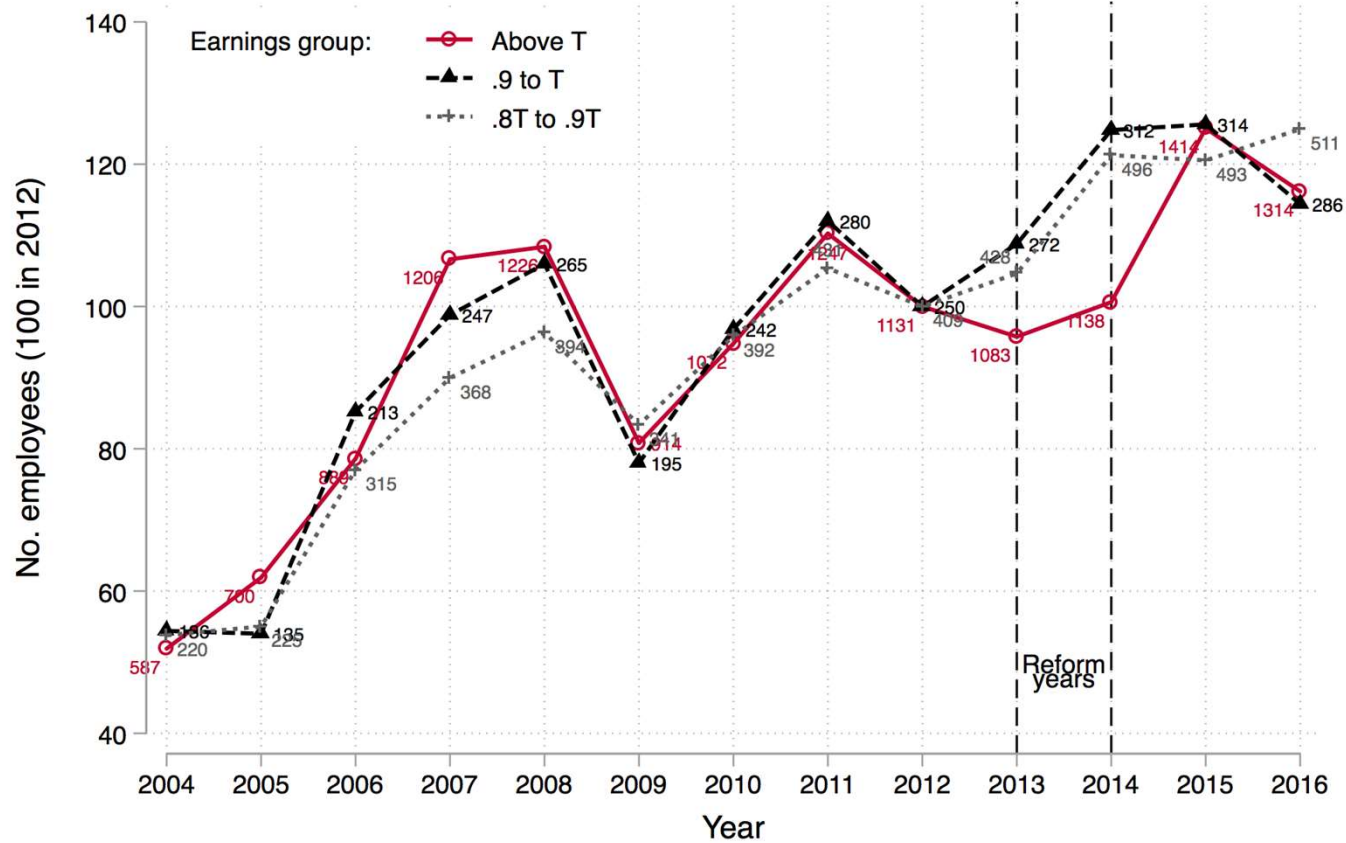
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# Conclusion

- First half of the century:
  - High level of inequality
  - Low tax revenue
- The income tax today:
  - paid by 50% of fiscal households
  - complemented by a flat rate income tax
- Importance of social security contributions since 1945
  - Important share of tax revenue in France
  - Redistributive impact with:
    - Uncapping of employer SSCs in the 80s
    - Reduction of employer SSCs on low incomes starting in 1993
  - Counteracted recent evolutions of factor-income inequality

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- André, M. and Guillot, M. (2014), 1914-2014: One hundred years of French income tax, IPP Policy Brief 13.
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