Intertemporal Labor Supply Substitution? Evidence from the Swiss Income Tax Holiday

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The Frisch Elasticity of Labor Supply

- How much more are people willing to work when their wage increases *temporarily*, e.g., due to a positive technology shock?

- Key parameter in macro models: it amplifies the effects of productivity shocks on labor supply and economic activity

- Many business cycle models require very large Frisch elasticities (1.5 – 4) to match business cycle movements in employment

- Hard to identify well empirically, especially for a macro-wide change

- Longstanding divide in the micro and macro literature
Contribution: A Population-wide Natural Experiment to Estimate the Observed Frisch Elasticity (with Frictions)

- Tax holidays: income faces a tax rate $\tau = 0$ for one period
- Ideal natural experiment (Chetty et al., 2013):
  - exogenous variation in wage rates *unrelated* to labor supply or human capital accumulation decisions
  - substantial *temporary* change in net-of-tax wages
  - *entire* population
  - *annual* frequency (relevant time frame for business cycles)
  - quasi-pure *substitution* effect
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**Our paper:**
- Variation across time and *regions*
- Identification: Diff-in-Diff (DiD) and Event Studies (ES)
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**Our paper:**
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**Most closely related papers:**
1990s Income Tax Reform in Switzerland

Transition from retrospective taxation to annual pay-as-you-earn
- Reasons: modernizing, simplifying and harmonizing
- Side effect: incomes earned during the two years prior to the change remained \textit{untaxed} (blank years, tax holiday)

|--------|------|------|------|------|------|------|

- Decided at Federal level in December 1990 (DBG and StHG)
- Cantons chose different years to change: 1999, 2001, and 2003
Outline

1. Introduction

2. Estimation Approach
   - Identifying Variation
   - First Stage
   - Salience
   - Common Macro Trends
   - Data

3. Results
   - Extensive Margin (Did more people work?)
   - Intensive Margin (Did workers work more hours?)

4. Conclusion
Identifying Variation: Timing Across Regions

Blank Years in Each Canton

- 1997/98, federal and cantonal
- 1997/98 federal, 1998 cantonal
- 1999/00, federal and cantonal
- 1999/00 federal, 2000 cantonal
- 1999/00, federal tax only
- 2001/02, federal and cantonal
- No blank years
First Stage: Substantial Change in Average Tax Rates

Total federal, cantonal and municipal tax, single taxpayer; weighted by municipality population.

1 CHF $\approx 1$ USD
First Stage: Substantial Change in Average Tax Rates

Total federal, cantonal and municipal tax, single taxpayer; weighted by municipality population.

1 CHF ≈ 1 USD
First Stage: Substantial Change in Average Tax Rates

![Diagram showing the average tax rate in % on a gross income of 100K CHF (real value 2010) from 1990 to 2010. The graph includes a tax holiday period from 1997-98 and 1998 to 1999-00. The tax rate is calculated as the total federal, cantonal, and municipal tax for single taxpayers, weighted by municipality population.](image)

Total federal, Cantonal and Municipal tax, Single Taxpayer; weighted by municipality population.

1 CHF ≈ 1 USD
First Stage: Substantial Change in Average Tax Rates

![Graph showing average tax rates over time]

- **Avg. tax rate in % on a gross income of 100K CHF (real value 2010)**
- **1 CHF ≈ 1 USD**

**Intertemporal Labor Supply Substitution**

Martínez, Saez, Siegenthaler
First Stage: Substantial Change in Average Tax Rates

Total federal, cantonal and municipal tax, single taxpayer; weighted by municipality population.

1 CHF $\approx 1$ USD
First Stage: Substantial Change in Average Tax Rates

![Graph showing changes in average tax rates from 1990 to 2010. The graph indicates a significant decrease in tax rates during the period 1997-98 and 1999-00, which are marked as 'Tax Holiday in...'. The graph also shows the total federal, cantonal and municipal tax for single taxpayers, weighted by municipality population.]

Total federal, cantonal and municipal tax, single taxpayer; weighted by municipality population.

1 CHF ≈ 1 USD

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First Stage: Substantial Change in Average Tax Rates
Mean average tax rate in the economy: 11.1%

1 CHF \approx 1 USD
First Stage: Substantial Change in Marginal Tax Rates

Mean marginal tax rate in the economy: 24%

Total federal, cantonal and municipal tax, single taxpayer; weighted by municipality population.

1 CHF ≈ 1 USD
Expected Behavioral Responses

- Extensive margin (average tax rate): more people work
- Intensive margin (marginal tax rate): people work more
- Tax avoidance margin: shift earnings into tax holiday years

- Expect larger responses for more elastic subgroups/subgroups with larger tax changes
  - Women
  - High income earners
  - Self-employed
Salience: Newspaper Coverage and Cantonal Votes

Newspaper Coverage

- Newspapers and magazines extensively covered the tax holidays, starting prior to the tax-free years, and with region-specific timing. 

- Many articles specifically discuss the tax saving opportunities.

Cantonal Votes

- 14 out of 25 cantons held a referendum.
- Voting material explains the tax holiday to a broad public.
Main Data: Matched AHV-Census Data

Social security data (AHV) 1981-2010
- panel data covering the universe of the Swiss population
- entire individual labor market histories containing uncapped labor incomes (incl. bonuses and stock options)
- job spells and unemployment spells per month

Census 2000 and 2010
- residential history
- marital status history
- household identifier (relevant for tax calculation)
- children
- education
Main Data: Matched AHV-Census Data

Disadvantages

- hours worked not known → focus on labor earnings
- non-random missing data in 1998 for employees → 1998 generally excluded from analysis
- self-employment incomes missing in 1999 & 2000
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   ■ Intensive Margin (Did workers work more hours?)

4 Conclusion
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Wage Employment Rate: Men Aged 20-60

Data source: AHV-STATPOP
Event Study - Regressions at Individual Level

\[ Y_{it} = \alpha_i + \alpha_t + \sum_{k=-4}^{4} \delta_k TH_{ct}^k + X_{it} + \epsilon_{it} \]

- **\( Y_{it} \):** outcome of individual \( i \) in period \( t \)
- **\( \alpha_i \) and \( \alpha_t \):** person and year fixed effects
- **\( \sum_{k=-4}^{4} \delta_k TH_{ct}^k \):** a sequence of event study dummies equal to 1 \( k \) periods away from the first year of the federal tax holiday in canton \( c \) (excluding \( t - 2 \), which serves as reverence period)
- **Controls \( X_{it} \):** age, age squared, age by gender; linear time trends by canton of residence; two dummies for \( t \leq 5 \) and \( t \geq 5 \)
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**Identifying assumptions:**
- Common trends in outcomes
  (e.g., employment and unemployment rates)
- Elastic labor demand
Was Labor Demand Elastic?

- Tax holidays create incentive to increase labor supply

- If labor demand is not perfectly elastic: wage rate could fall
  → dampened effect on earnings
  → estimated Frisch elasticity too low

- BUT: Wage Structure Survey (LSE) shows:
  - If anything increasing wage rates
  - Small but positive response of hours worked
Wage Rate

Data Source: Wage Structure Survey (LSE)
Hours Worked

Data Source: Wage Structure Survey (LSE)
Event Study: First Stage

- The graph shows the effect of a tax holiday on the log(1 - average tax rate) over different years from the tax holiday start.
- The effect is measured for different years: k=-4, k=-3, k=-2, k=-1, 1st TH, 2nd TH, k=2, k=3, k=4.
- The red shaded area indicates the period of the tax holiday.
- The data points are marked with bars, indicating the variation in the effect.

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Event Study: Extensive Margin (Wage Earners)

Effect of tax holiday

log(1 - average tax rate)

Employment 0/1

Years from tax holiday start

k=-4 k=-3 k=-2 k=-1 1st TH 2nd TH k=2 k=3 k=4

Intertemporal Labor Supply Substitution Martínez, Saez, Siegenthaler
Nothing Ever Happens at the Extensive Margin

- Married women
- Older workers (age 51-60)
- Number of jobs
- Months employed
- Entry or exit of self-employed
- ...

Intertemporal Labor Supply Substitution

Martínez, Saez, Siegenthaler
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Average Wage Earnings

![Graph showing wage earnings per person (in 1k CHF) from 1990 to 2010, with tax holiday periods shaded in blue and green.](image)

1 CHF ≈ 1 USD

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Average Self-employment Earnings

Sample: Individuals with positive self-employment earnings
Event Study: First Stage

The graph illustrates the effect of a tax holiday on the intertemporal labor supply over various years from the tax holiday start. The x-axis represents the years from the tax holiday start, and the y-axis shows the effect of the tax holiday. The tax holiday periods are indicated by shaded regions, and the years are labeled from $k=-4$ to $k=4$. The log(1 - marginal tax rate) is plotted to show the impact on labor supply substitution over time.
Event Study: Intensive Margin (Wage Earners)

Intertemporal Labor Supply Substitution Martínez, Saez, Siegenthaler 27/33
Event Study: Intensive Margin (Wage Earners)

Years from tax holiday start

Average wage earnings

Effect of tax holiday

Years from tax holiday start

Intertemporal Labor Supply Substitution Martínez, Saez, Siegenthaler
Frisch Elasticity Estimates (Wage Earners)

Frisch elasticity \( \eta^F = \Delta \ln y / \Delta \ln [1 - \tau] \)

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th></th>
<th>Women</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Employment rate</td>
<td>Earnings(^a) p. employee</td>
<td>Employment rate</td>
<td>Earnings(^a) p. employee</td>
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<tr>
<td><strong>Panel A: Total sample</strong></td>
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<tr>
<td>Frisch elasticity ( \eta^F )</td>
<td>-0.001</td>
<td>0.037*</td>
<td>-0.017</td>
<td>0.018</td>
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<tr>
<td><strong>Panel B: Married with children</strong></td>
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<tr>
<td>Frisch elasticity ( \eta^F )</td>
<td>-0.005</td>
<td>0.052</td>
<td>-0.071</td>
<td>0.027</td>
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<td><strong>Panel C: Married no children</strong></td>
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<tr>
<td>Frisch elasticity ( \eta^F )</td>
<td>-0.004</td>
<td>0.032**</td>
<td>0.023</td>
<td>0.016</td>
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<tr>
<td>Observations</td>
<td>105</td>
<td>105</td>
<td>105</td>
<td>105</td>
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<tr>
<td>Canton group FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Period FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</tbody>
</table>

\(^a\) In 1000 CHF. *\( p < 0.1 \), ** \( p < 0.05 \), *** \( p < 0.01 \).
High income: avg. real wage earnings in 1994-1996 > 100k CHF/year
### Frisch by Pre-Reform Earnings (annual avg. 1994-1996)

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<tr>
<td><strong>Panel A: 1–25k CHF</strong></td>
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<tr>
<td>Frisch elasticity $\eta^F$</td>
<td>-0.025</td>
<td>0.034</td>
<td>0.070</td>
<td>0.236</td>
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<tr>
<td><strong>25k–50k CHF</strong></td>
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<tr>
<td>Frisch elasticity $\eta^F$</td>
<td>-0.010</td>
<td>0.013</td>
<td>0.020</td>
<td>0.238</td>
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<td><strong>50k–100k CHF</strong></td>
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<tr>
<td>Frisch elasticity $\eta^F$</td>
<td>-0.009</td>
<td>0.013</td>
<td>0.018</td>
<td><strong>0.261</strong></td>
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<td><strong>100k–200k CHF</strong></td>
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<tr>
<td>Frisch elasticity $\eta^F$</td>
<td>-0.001</td>
<td><strong>0.037</strong></td>
<td><strong>0.038</strong></td>
<td><strong>0.248</strong>*</td>
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<tr>
<td><strong>More than 200k CHF</strong></td>
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<tr>
<td>Frisch elasticity $\eta^F$</td>
<td>-0.001</td>
<td><strong>0.086</strong>*</td>
<td><strong>0.089</strong></td>
<td><strong>0.182</strong>*</td>
</tr>
</tbody>
</table>

- Observations: 105, 105, 105, 80
- Canton group FE: Yes, Yes, Yes, Yes
- Period FE: Yes, Yes, Yes, Yes
Event Study: Self-Employment Income

- By gender

Effect of tax holiday

<table>
<thead>
<tr>
<th>Time from tax holiday start</th>
<th>All self-employed</th>
<th>&gt;100k CHF in 1994/96</th>
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</thead>
<tbody>
<tr>
<td>k=-4</td>
<td></td>
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<td>k=-3</td>
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<td>k=-2</td>
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<td>k=-1</td>
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<td>1st TH</td>
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<td>2nd TH</td>
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<td>k=2</td>
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<td>k=3</td>
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<td>k=4</td>
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</tbody>
</table>

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Conclusion

1. Significant but quantitatively small responses of earnings consistent with an observed Frisch elasticity of 0.05

2. No responses along the extensive margin, even for groups less attached to the labor force

3. Self-employed and high income earners display larger responses

4. Estimates may even be upward biased due to tax avoidance

*Our results do not support the idea that the labor supply channel plays a major role in explaining business cycles.*
Thank you.

Comments and questions welcome: isabel.martinez@unisg.ch
Appendix
Empirical Evidence: Extensive Margin Elasticity

\[ \epsilon_{ext}^F = \frac{\Delta \log (E/P)}{\Delta \log (w^{net})} \]

Chetty et al. (2013), Table 1

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<tr>
<td>10. Carrington (1996)</td>
<td>0.43</td>
<td>0.08</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>11. Gruber and Wise (1999)</td>
<td>0.23</td>
<td>0.07</td>
<td></td>
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<tr>
<td>12. Bianchi, Gudmunndsson, and Zoega (2001)</td>
<td>0.42</td>
<td>0.07</td>
<td></td>
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<tr>
<td>13. Card and Hyslop (2005)</td>
<td>0.38</td>
<td>0.03</td>
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<tr>
<td>14. Brown (2009)</td>
<td>0.18</td>
<td>0.01</td>
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<tr>
<td>15. Manoli and Weber (2011)</td>
<td>0.25</td>
<td>0.01</td>
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<td>Unweighted Mean</td>
<td>0.32</td>
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</tbody>
</table>
Average Tax Rates over Time: Low Income Households

![Graph showing average tax rates over time for low income households.](image)

Data source: Parchet (2018) and ESTV, own calculations

Intertemporal Labor Supply Substitution

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Average Tax Rates over Time: SSER-Sample

Data source: Parchet (2018) and ESTV, SSER-data, own calculations
Marginal Tax Rates over Time: SSER-Sample

Data source: Parchet (2018) and ESTV, SSER-data, own calculations
Iceland 1987 Tax Holiday: No Obvious Counterfactual

Figure 1a: 1987 Tax Holiday in Iceland
Salience: Newspaper Coverage by Region

Number of articles per outlet referring to the tax holidays

Articles per newspaper


1998 (NZZ, Tages-Anzeiger)
1999-00 (Der Bund, BZ, Neue Luzerner Zeitung)
2000 (Solothurner Zeitung, Tribune de Genève)
2001-02 (24 Heures, Le Matin, Le Temps)

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Salience: Popular Referenda Held in 14 Cantons

Dates of popular referenda on the reform

- ZH 8.6.1997
- AG 18.4.1999
- AI 25.4.1999
- GR 13.6.1999
- BL 13.6.1999
- OW 24.10.1999
- GL 7.5.2000
- AR 21.5.2000
- BE 21.5.2000
- UR 21.5.2000
- SH 27.8.2000
- SZ 24.9.2000
- NW 26.11.2000
- ZG 26.11.2000

Date of popular referendum
Gewusst wie:

2003 wird im Wallis die Gegenwartsbemessung eingeführt.
Was hat dieser Steuersystemwechsel für Auswirkungen in der Bemessungslücke 2001 und 2002

**Ablauf des Wechsels des Veranlagungssystems**

| Jahr | Einkommen | Lottogewinne | Besteuerung
|------|------------|--------------|---------------
| 1999 | Fr. 60000  | Fr. 70000    | 2001 im Wallis
| 2000 | Fr. 65000  | Fr. 10000    | 2002 im Wallis


Vorteile der neuen Methode

Vereinfachtes Zahlenbeispiel:

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<td><strong>Einkünfte:</strong></td>
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<tr>
<td>Ordentliches Jahreseinkommen</td>
<td>70'000</td>
<td>70'000</td>
<td><strong>80'000</strong></td>
<td>90'000</td>
<td>65'000</td>
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<td>ausserordentliche Einkünfte</td>
<td>100'000</td>
<td>20'000</td>
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<tr>
<td>ausserordentliche Aufwendungen</td>
<td>30'000</td>
<td>0</td>
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<td><strong>Steuerveranlagung:</strong></td>
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<tr>
<td>ordentl. Einkommen: Revision vorbehalten!</td>
<td>70'000</td>
<td>70'000</td>
<td>65'000</td>
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<td>(80'000 und 90'000 fallen in die Bemessungslücke)</td>
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<td>ausserordentliches Einkommen:</td>
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<td>(separate Jahressteuer)</td>
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<td>ausserordentliche Aufwendungen:</td>
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<td><strong>Revision der HE 1999/2000:</strong></td>
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<td>70'000 – (30'000 : 2) = 55'000</td>
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This table explains the transition with a numerical example, pointing out the blank years and extraordinary incomes and expenses (canton AI).
Salience: Pillar 3a Savings

No incentives to contribute to pillar 3a during blank years

Number of accounts (in mio)

Source: BFS, BSV

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Common Macro Trends: Growth in GDP p.c.

Annual growth rate in GDP p.c.


1997-98 1998 1999-00 2000 2001-02

Switzerland

Tax Holiday in...

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Hours Worked per Month: Married Women

Data Source: Wage Structure Survey (LSE)
Hours Worked per Month: Single Women

Data Source: Wage Structure Survey (LSE)
Hours Worked per Week (SLFS)

Data Source: SLFS (SAKE)
Event Study: Extensive Margin (Wage Earners)

-0.05
-0.025
0
0.025
0.05

Effect of tax holiday

Years from tax holiday start

Employment (Extensive Margin)

k=-4
k=-3
k=-2
1st TH
k=-1
2nd TH
K=2
K=3
K=4

Intertemporal Labor Supply Substitution
Martínez, Saez, Siegenthaler
Employment Rate (SLFS)

Data source: SLFS (SAKE)
### Months Employed, Number of Jobs, the Share of Self-Employed, and Between-Canton Migration

<table>
<thead>
<tr>
<th></th>
<th>(1) Jobs per employed</th>
<th>(2) Months employed per employed</th>
<th>(3) Unemployed / pop (in %)</th>
<th>(4) In-migrant / pop. (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total sample</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank year</td>
<td>-0.0031</td>
<td>0.0178</td>
<td>-0.306</td>
<td>-0.020</td>
</tr>
<tr>
<td></td>
<td>(0.0052)</td>
<td>(0.0108)</td>
<td>(0.239)</td>
<td>(0.052)</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank year</td>
<td>-0.0030</td>
<td>0.0173</td>
<td>-0.307</td>
<td>-0.027</td>
</tr>
<tr>
<td></td>
<td>(0.0055)</td>
<td>(0.0112)</td>
<td>(0.266)</td>
<td>(0.048)</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank year</td>
<td>-0.0031</td>
<td>0.0175</td>
<td>-0.318</td>
<td>-0.010</td>
</tr>
<tr>
<td></td>
<td>(0.0054)</td>
<td>(0.0132)</td>
<td>(0.223)</td>
<td>(0.056)</td>
</tr>
<tr>
<td><strong>Married women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank year</td>
<td>-0.0033</td>
<td>0.0152</td>
<td>-0.303</td>
<td>0.012</td>
</tr>
<tr>
<td></td>
<td>(0.0066)</td>
<td>(0.0194)</td>
<td>(0.180)</td>
<td>(0.024)</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>105</td>
<td>105</td>
<td>105</td>
<td>105</td>
</tr>
<tr>
<td><strong>Canton group FE</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Period FE</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Intertemporal Labor Supply Substitution  
Martínez, Saez, Siegenthaler
### Individual-level IV Estimates (Wage Earners)

<table>
<thead>
<tr>
<th></th>
<th>Employee 0/1 Men</th>
<th>Avg. wage earnings&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Employee 0/1 Women</th>
<th>Avg. wage earnings&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total sample</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st stage</td>
<td>0.115</td>
<td>0.248</td>
<td>0.106</td>
<td>0.238</td>
</tr>
<tr>
<td>Effect on $\log(1 - \tau_{it})$</td>
<td>(0.002)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>2nd stage</td>
<td>-0.008</td>
<td>3,792</td>
<td>-0.015</td>
<td>323</td>
</tr>
<tr>
<td>$\log(1 - \tau_{it})$</td>
<td>(0.005)</td>
<td>(606)</td>
<td>(0.007)</td>
<td>(251)</td>
</tr>
<tr>
<td>Frisch elasticity $\eta^F$</td>
<td><strong>-0.01</strong> (0.005)</td>
<td><strong>0.04</strong> (0.006)</td>
<td><strong>-0.02</strong> (0.009)</td>
<td><strong>0.01</strong> (0.005)</td>
</tr>
<tr>
<td>Observations</td>
<td>12,905,961</td>
<td>10,878,290</td>
<td>13,241,977</td>
<td>9,470,890</td>
</tr>
<tr>
<td><strong>Married w/ children</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frisch elasticity $\eta^F$</td>
<td>0.00 (0.005)</td>
<td><strong>0.04</strong> (0.007)</td>
<td>0.00 (0.015)</td>
<td><strong>0.05</strong> (0.008)</td>
</tr>
<tr>
<td><strong>Married no children</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frisch elasticity $\eta^F$</td>
<td><strong>-0.03</strong> (0.006)</td>
<td><strong>0.03</strong> (0.005)</td>
<td>-0.01 (0.006)</td>
<td><strong>0.01</strong> (0.003)</td>
</tr>
<tr>
<td><strong>Tertiary education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frisch elasticity $\eta^F$</td>
<td>0.00 (0.007)</td>
<td><strong>0.05</strong> (0.006)</td>
<td><strong>-0.02</strong> (0.008)</td>
<td><strong>0.01</strong> (0.005)</td>
</tr>
</tbody>
</table>

<sup>a</sup> In CHF. Numbers in bold indicate statistical significance with $p < 0.05$. 

*Intertemporal Labor Supply Substitution* 
Martínez, Saez, Siegenthaler 
52/33
### Individual-level IV Estimates by Pre-Holiday Earnings (Wage Earners)

#### Macro estimates

<table>
<thead>
<tr>
<th>Earnings Level</th>
<th>Frisch Elasticity $\eta^F$</th>
<th>Employee 0/1</th>
<th>Aver. wage earnings</th>
<th>Employee 0/1</th>
<th>Aver. wage earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–25k CHF</td>
<td></td>
<td>Men</td>
<td>Men</td>
<td>Women</td>
<td>Women</td>
</tr>
<tr>
<td>Frisch Elasticity $\eta^F$</td>
<td>-0.01 (0.025)</td>
<td>-0.01 (0.025)</td>
<td><strong>-0.04</strong> (0.012)</td>
<td>-0.03 (0.018)</td>
<td></td>
</tr>
<tr>
<td>25–50k CHF</td>
<td></td>
<td>Men</td>
<td><strong>0.03</strong> (0.008)</td>
<td>-0.01 (0.006)</td>
<td><strong>0.02</strong> (0.004)</td>
</tr>
<tr>
<td>Frisch Elasticity $\eta^F$</td>
<td>-0.01 (0.010)</td>
<td><strong>0.03</strong> (0.004)</td>
<td>-0.01 (0.006)</td>
<td><strong>0.01</strong> (0.003)</td>
<td></td>
</tr>
<tr>
<td>50–100k CHF</td>
<td></td>
<td>Men</td>
<td><strong>0.03</strong> (0.004)</td>
<td>-0.01 (0.015)</td>
<td><strong>0.02</strong> (0.010)</td>
</tr>
<tr>
<td>Frisch Elasticity $\eta^F$</td>
<td><strong>-0.02</strong> (0.007)</td>
<td><strong>0.04</strong> (0.006)</td>
<td>-0.01 (0.015)</td>
<td><strong>0.02</strong> (0.010)</td>
<td></td>
</tr>
<tr>
<td>100–200k CHF</td>
<td></td>
<td>Men</td>
<td><strong>0.08</strong> (0.015)</td>
<td>-0.09 (0.062)</td>
<td><strong>0.09</strong> (0.046)</td>
</tr>
<tr>
<td>Frisch Elasticity $\eta^F$</td>
<td>0.00 (0.010)</td>
<td><strong>0.08</strong> (0.015)</td>
<td>-0.09 (0.062)</td>
<td><strong>0.09</strong> (0.046)</td>
<td></td>
</tr>
</tbody>
</table>

Numbers in bold indicate statistical significance with $p < 0.05$. 

Intertemporal Labor Supply Substitution

Martínez, Saez, Siegenthaler

53/33
Event Study: Self-Employment Income by Gender

Effect of tax holiday

Time from tax holiday start

Male
Female
Bonus Incidence: Insurance Industry

Fraction with bonus above 20K CHF

Data Source: Wage Structure Survey (LSE)
Raffinierte Ärzte


Genauere Abklärungen hätten dann ergeben, dass es sich um Kantone handle, die gegenwärtig auf die einjährige Steuerveranlagung umstellen. Das Jahr 1999 fällt daher dort in die Bemessungslücke. Schlaue Ärzte verrechneten deshalb letztjährige Leistungen erst in diesem Jahr, um das so erzielte Einkommen nicht versteuern zu müssen. So viel Raffinesse haben ihnen die Krankenkassen offenbar nicht zugetraut.


