

# Estimating the Direct and Indirect Tax Contributions of Households in Ireland

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- 2. Research Questions & Objectives**
- 3. Data**
- 4. Direct Taxation**
- 5. Indirect Taxation**
- 6. Some Results**
- 7. Next Steps**

# 1. Introduction

- ‘Taxpayers’ & Income tax
- Households contribute to the exchequer in a number of ways
  - **Direct Tax**
    - income tax, PRSI, USC
    - apparent if often misunderstood
    - progressive
  - **Indirect Tax**
    - VAT, excise, local taxes and charges
    - less apparent
    - regressive
    - big % of exchequer income (€10.7bn; 21.4% in 2014)

**Table A1: Estimated Composition of Taxation Revenues, 2014**

	2014	2014%
Income tax	17,045	33.9%
VAT	10,740	21.4%
Social Insurance	10,236	20.4%
Excise duties	4,815	9.6%
Corporation tax	4,380	8.7%
Stamp duties	1,475	2.9%
Local taxes/charges	550	1.1%
CGT	400	0.8%
CAT	380	0.8%
Customs	255	0.5%
<b>Total</b>	<b>50,276</b>	<b>100.0%</b>

**Source:** Calculated from Department of Finance, Budget 2014 (C15, C30)

**Note:** This table updates Collins (2011:91)

## 2. Research Q & Objectives

- **Research Questions/Objectives**
  - Quantify the overall contribution of households
  - Offer a more informed insight into tax contributions across the income distribution and among various groups
  
  - Budget 2012 and VAT increase
  - Limited consideration of effects of: VAT, Excise, levies
  - VAT break extensions
  - VAT reform possibilities
  - Medium-term: options for tax reductions
- **Building on other Research**
  - CSO reports; Madden, Barrett and Wall, Leahy et al

## 3. Data

- Only one possible source for a study like this
- Household Budget Survey
- Latest
  - Released March/October 2012 (8<sup>th</sup> edition)
  - Period August 2009 – September 2010
  - 5,891 households
  - Controls for non-response etc
  - ISSDA and CSO
- CPI basket = objective
  - Income – a bi-produce; not as good as SILC
  - Expenditure – only comprehensive source

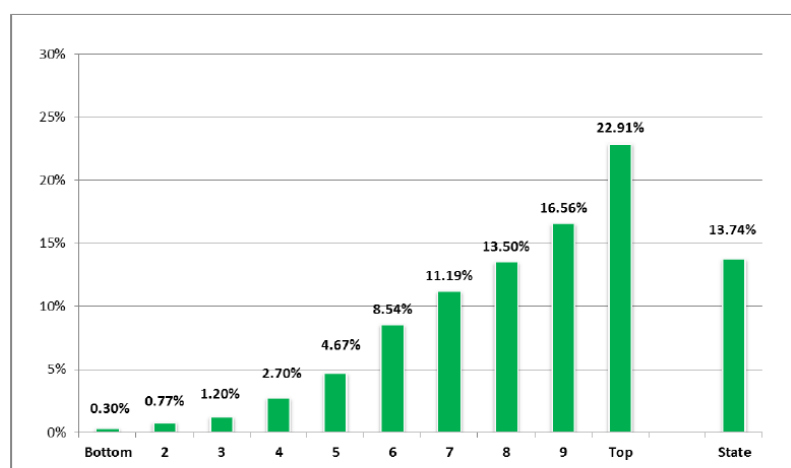
## 4. Direct Taxation

- Income + Social Insurance Contributions
- Average figures:
  - Gross Income = €3,577
  - Tax & SI = €7,360
  - Disposable Income = €46,217
- Progressive across the income distribution
  - reflecting the structure of the income tax and SI system
  - Graph as a % of Gross income (effective rates)

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Chart 1: Total Income Tax & Social Insurance as % Gross Income



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## 5. Indirect Taxation

- The challenging part of the research
  - 538 expenditure items/categories
  - from bread to Christmas crackers...
  - establish a VAT rate for each
  - most straightforward, but some assumptions using representative products
  - very useful Revenue Commissioners VAT guide
- Excise duties
  - alcohol and tobacco
  - alcohol = assumptions re. representative prices per litre
  - includes carbon tax

- Other indirect taxes
  - air travel tax; insurance levies; NORA, TV Licence Fee, Vehicle Tax...
- Leaving out:
  - Property tax (not there in 2009/10...)
  - WEE (in base price)
  - VRT
  - Local utility charges (not clearly a tax...)

## A Few Worked Examples

- Item: *Childrens' (15 years or under) clothing accessories*
- **Annual Spending: €1.21**
- Assumes that 6 years are free (under 11 years old)
- Assumes that 31% of the time the clothes were charged at 21.5% VAT and that 64% of the time they were charged at 21% VAT – changed in Jan 2010
- $=((((€1.21/11)*5)/121)*21)*64\% + (((€1.21/11)*5)/121.5)*21.5)*36\%$
- = **Annual VAT of €0.10**

- Item: *Cigarettes*
- **Annual Spend: €514.52**
- Average Price per Packet: €8.55
- Packets Bought:  $514.52/8.55 = 60.18$
- Taxation as a % of price (€8.55) = 78.48%
- = 61.17% in Excise and 17.31% in VAT
- **Excise = €314.73 & VAT = €99.06**
- **Total Tax = €403.80**

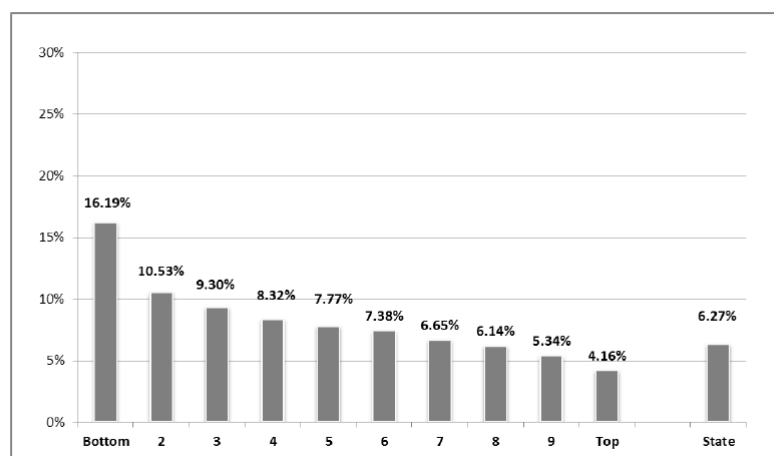
## 6. Some Results

- Graphs showing these, by decile and overall
  1. VAT
  2. Excise
  3. Other Indirect (levies + others)
  4. Total Indirect Taxes (1+2+3)
  5. Indirect taxes as a % of total tax contribution
  6. Total Household Tax Contributions (Direct + Indirect)

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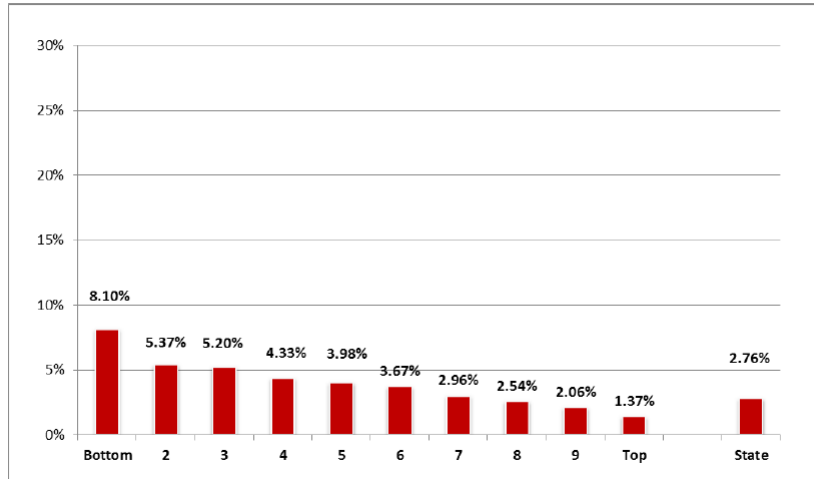
Chart 2: VAT as a % of Gross Income



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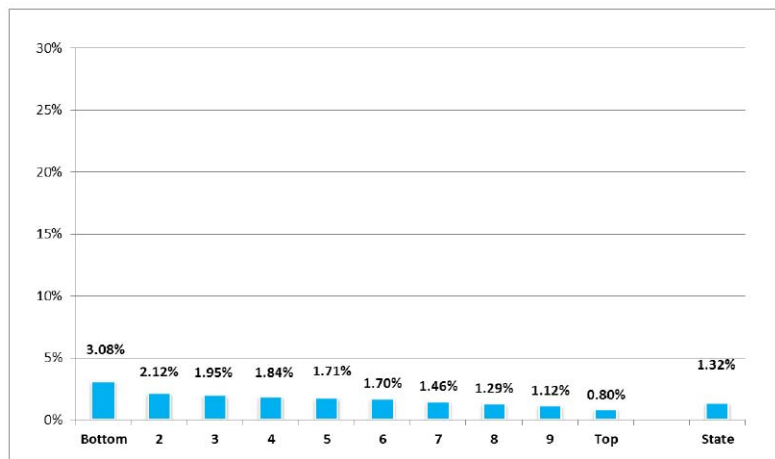
**Chart 3: Excise as a % of Gross Income**



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**Chart 4: Levies & Other Indirect Taxes as a % of Gross Income**



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Chart 5: Total Indirect Taxes as a % of Gross Income

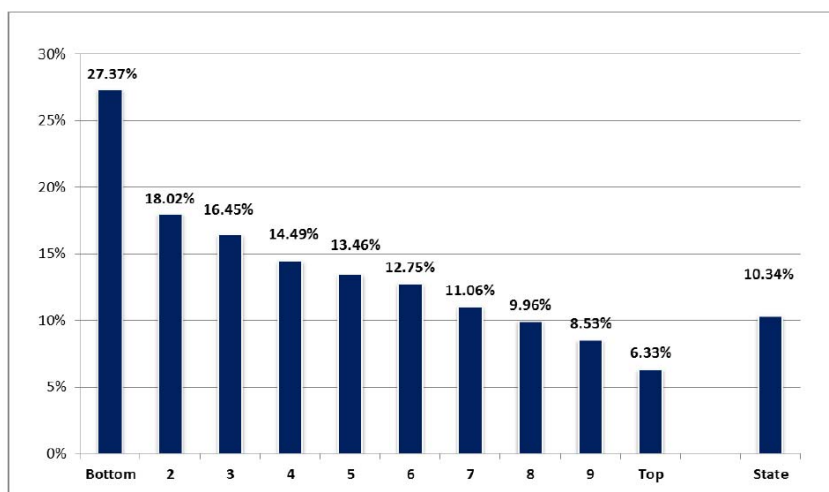


Table 3: Nominal Values of various Indirect Taxation sources by decile, 2009/10

Decile	VAT €	Excise €	Levies €	Other Indirect €	Total Indirect €
<b>Bottom</b>	1,601.20	800.50	38.75	265.42	2,705.86
2	1,666.53	849.81	42.92	293.14	2,852.40
3	2,118.63	1,183.57	51.37	392.34	3,745.91
4	2,451.71	1,274.09	67.85	473.73	4,267.38
5	2,846.97	1,458.33	80.09	546.26	4,931.65
6	3,378.53	1,682.30	107.56	668.68	5,837.07
7	3,796.87	1,689.36	128.78	703.83	6,318.83
8	4,386.07	1,811.01	148.99	769.22	7,115.30
9	4,921.15	1,898.38	167.72	863.93	7,851.19
<b>Top</b>	6,439.14	2,125.49	215.73	1,022.56	9,802.92
<b>State</b>	<b>3,360.16</b>	<b>1,477.12</b>	<b>104.95</b>	<b>599.82</b>	<b>5,542.05</b>

Note: Other indirect taxes include vehicle tax and television licence.

**Table 4: Indirect Taxation sources by decile, 2009/10 as % Gross Income**

Decile	VAT	Excise	Levies	Other Indirect	Total Indirect
<b>Bottom</b>	16.19%	8.10%	0.39%	2.68%	27.37%
<b>2</b>	10.53%	5.37%	0.27%	1.85%	18.02%
<b>3</b>	9.30%	5.20%	0.23%	1.72%	16.45%
<b>4</b>	8.32%	4.33%	0.23%	1.61%	14.49%
<b>5</b>	7.77%	3.98%	0.22%	1.49%	13.46%
<b>6</b>	7.38%	3.67%	0.23%	1.46%	12.75%
<b>7</b>	6.65%	2.96%	0.23%	1.23%	11.06%
<b>8</b>	6.14%	2.54%	0.21%	1.08%	9.96%
<b>9</b>	5.34%	2.06%	0.18%	0.94%	8.53%
<b>Top</b>	4.16%	1.37%	0.14%	0.66%	6.33%
<b>State</b>	<b>6.27%</b>	<b>2.76%</b>	<b>0.20%</b>	<b>1.12%</b>	<b>10.34%</b>

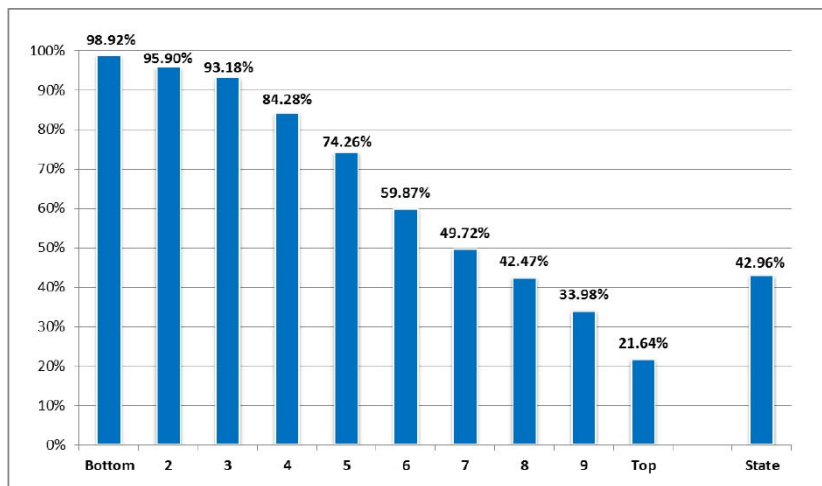
Note: Table A11 in the appendix presents another set of comparisons benchmarked against disposable income. It displays similar results.



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**Chart 6: Total Indirect Taxes as a % of Total Tax Paid, by decile**



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Chart 7: Total Household Tax Contributions, % Gross Income

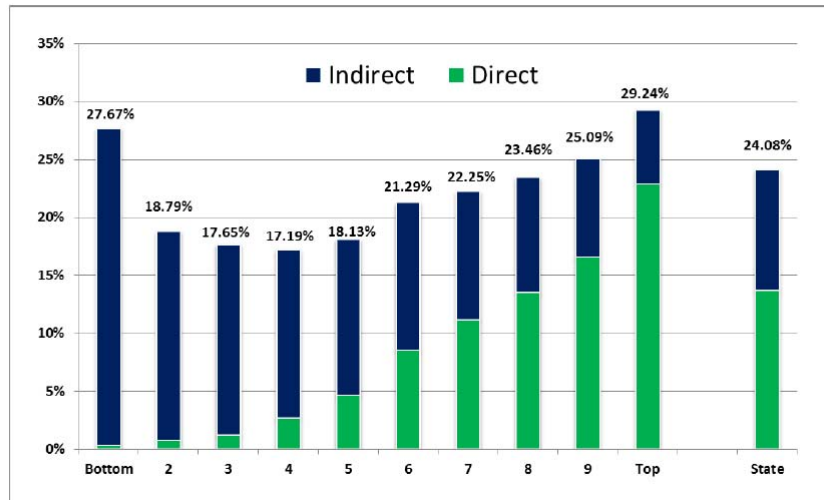
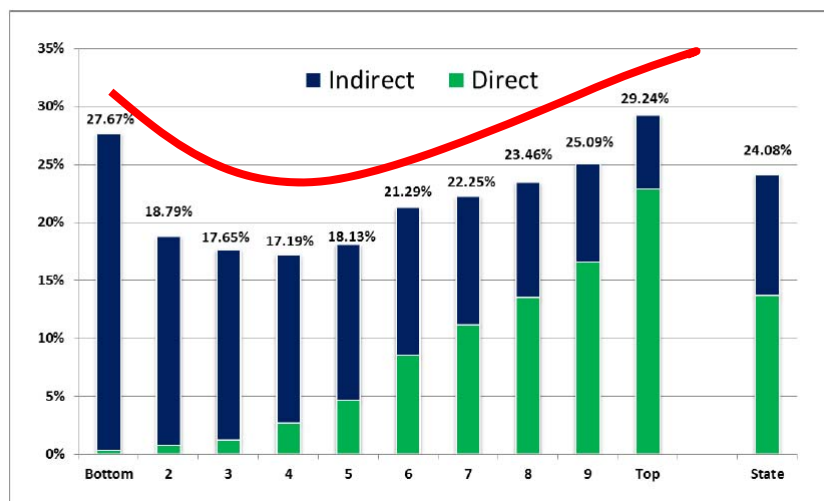


Chart 7: Total Household Tax Contributions, % Gross Income



**Table 5: Direct, Indirect and Total Household Taxation as % Gross Income**

Decile	Direct	Indirect	Total
<b>Bottom</b>	0.30%	27.37%	27.67%
2	0.77%	18.02%	18.79%
3	1.20%	16.45%	17.65%
4	2.70%	14.49%	17.19%
5	4.67%	13.46%	18.13%
6	8.54%	12.75%	21.29%
7	11.19%	11.06%	22.25%
8	13.50%	9.96%	23.46%
9	16.56%	8.53%	25.09%
<b>Top</b>	22.91%	6.33%	29.24%
<b>State</b>	<b>13.74%</b>	<b>10.34%</b>	<b>24.08%</b>

**Note:** See table A12 in the appendix for the corresponding nominal amounts.

- **Comments on these results:**
  - Indirect taxation is regressive
  - Judging tax contributions by income tax only = very misleading
  - Total tax contributions: U-Shaped across the income distribution
  - Implications for our understanding of policy options and impacts

## 7. Next Steps

- ...suggestions welcome
- Incorporate:
  - Household size/equivalisation
  - Other household categories
  - VAT simulations
    - VAT 9% rate
    - Distributive impact of the increase to 23%
    - Altering certain rates and categories
    - Retentions of the 0% / Exempt rates
  - Integrate into NERI micro model

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