FAMILY 500+
AND WOMENS’ LABOUR
MARKET PARTICIPATION

IGA MAGDA
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Background & research question

• Significant increase in child benefits after the introduction of the 500+ benefits
• Child benefits or other non-labour income can have a negative impact on female labour force participation (Killingsworth & Heckman 1986, Jaumotte 2006)

• Did the introduction of the Family 500+ Programme have a negative impact on female labour supply?
  • Labour supply = employed + unemployed
Decrease in unemployment rate (since 2013)

Unemployment rate, age 20-49, Poland

- Male
- Female
The decrease in unemployment of women was to a larger extent the result of labour market withdrawals.

Decomposition of changes in the unemployment rate (age 20-49), 2015-2016

- men
- women

- residual
- net outflow from unemployment to inactivity
- net outflow from employment to inactivity
- net outflow from unemployment to employment
Men’s participation rates slightly increasing since 2013, stable among women

Labour force participation rates, age 20-49

- **Men**
- **Women**
Decline in LFPR among low educated women

Labour force participation rates for low educated (basic vocational and lower) men and women, age 20-49
The 2016 decrease concerned all women with children.

Labour force participation rates of women (age 20-49) by number of children:

- 50%
- 55%
- 60%
- 65%
- 70%
- 75%
- 80%
- 85%

- 2007: no children <18, one child, two children, three or more children
- 2008: no children <18, one child, two children, three or more children
- 2009: no children <18, one child, two children, three or more children
- 2010: no children <18, one child, two children, three or more children
- 2011: no children <18, one child, two children, three or more children
- 2012: no children <18, one child, two children, three or more children
- 2013: no children <18, one child, two children, three or more children
- 2014: no children <18, one child, two children, three or more children
- 2015: no children <18, one child, two children, three or more children
- 2016: no children <18, one child, two children, three or more children
Disentangling the effect of Family 500+ Programme

• We study changes in labour market withdrawal rates: were they different among women eligible and non eligible to the 500+ benefit?

• Difference – in – differences approach
Difference-in-differences estimation – concept

- **Outcome**: quarterly withdrawals from LF
- **Treatment**: eligibility to the 500+ allowance
- **Treated group**: women with one or two children eligible to the 500+ transfer
- **Control group**: women with one child, not eligible to the 500+ transfer
- **Before treatment**: April-September 2015
- **After treatment**: April-September 2016
Data & methodology details

  - For difference-in-differences: quarterly panel for 2015 and 2016
- Sample: active women aged 20-49 (maternity and parental leaves excluded)
- Common trend assumption:
  - Kernel propensity score matching
Quarterly withdrawal rate among women eligible to 500+ would be 1.6 pp less without the effect of the transfer.

<table>
<thead>
<tr>
<th></th>
<th>Outcome: flow from activity to inactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016 vs 2015</td>
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<tr>
<td>Period effect</td>
<td>-0.007</td>
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<tr>
<td></td>
<td>(0.005)</td>
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<tr>
<td>Treatment effect</td>
<td>0.004</td>
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<tr>
<td></td>
<td>(0.005)</td>
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<tr>
<td><strong>Difference-in-differences effect</strong></td>
<td>0.016**</td>
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<tr>
<td></td>
<td>(0.007)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.027***</td>
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<tr>
<td></td>
<td>(0.003)</td>
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<tr>
<td>Observations</td>
<td>10,311</td>
</tr>
</tbody>
</table>
40-55 thousand women withdrew from the labour market in the second half of 2016 due to the 500+ benefit.

Quarterly withdrawal rate among women eligible to 500+ would be 1.6 – 2.2 pp less without the effect of the transfer.
The effect is even stronger once composition is accounted for.

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<th>Outcome: flow from activity to inactivity 2016 vs 2015</th>
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</thead>
<tbody>
<tr>
<td><strong>Period effect</strong></td>
<td>-0.014***</td>
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<td>(0.005)</td>
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<tr>
<td><strong>Treatment effect</strong></td>
<td>-0.006</td>
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<td>(0.005)</td>
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<td><strong>Difference-in-differences effect</strong></td>
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<tr>
<td></td>
<td>(0.007)</td>
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<tr>
<td><strong>Constant</strong></td>
<td>0.038***</td>
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<td>(0.004)</td>
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<td><strong>Observations</strong></td>
<td>10,310</td>
</tr>
</tbody>
</table>
Conclusions

What we know:
• There was a statistically significant effect of Family 500+ on women’s increased withdrawal from the labour market
• The results were likely heterogeneous across educational groups

What we don’t know:
• To what extent was it a one-off event?
• Impact on labour market entrance/ re-entrance?
• Impact on men’s activity rates?
• Impact on working hours?
• Impact on unregistered employment/ unregistered payments?
Research paper coming by the end of 2017

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