The Socio-Economic Impact of Rising Gas Tariffs

Oleksandra Betliy, Jörg Radeke

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Outline

1. **Introduction**
2. Impact on households' energy cost
3. Impact of gas price increase on poverty
4. Social welfare system and impact on subsidy payments
5. Payment morale and Naftogaz revenues
6. Overall Impact assessment
7. Key policy recommendations

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1. Introduction

- Gas prices have to be increased (see PP/02/2012)
- Government is right to be concerned about the social and economic impact

=> Need to assess the socio economic impact of higher gas prices

The main questions are:

- What is the impact of an increase in gas tariffs on households' energy cost?
- How would the adjustment affect incomes and, in turn, fuel poverty?
- Is the current social security system able to mitigate the impact on fuel poverty?
- What are the additional costs on welfare outlays for the government?
- Would higher prices affect payment morale?
- What is our overall assessment of the impact of the assumed gas tariff increase?

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1. Introduction

- We assume the following scenario:

  1. Private households: 50% increase of gas tariffs
  2. Heating companies: 50% increase of gas tariffs

- Thus, we would expect two effects on private households
- Firstly, the impact from higher cost through higher gas bills
- Secondly, the gas tariff rise for heating companies will lead to higher heating tariffs for those connected to the central heating grid

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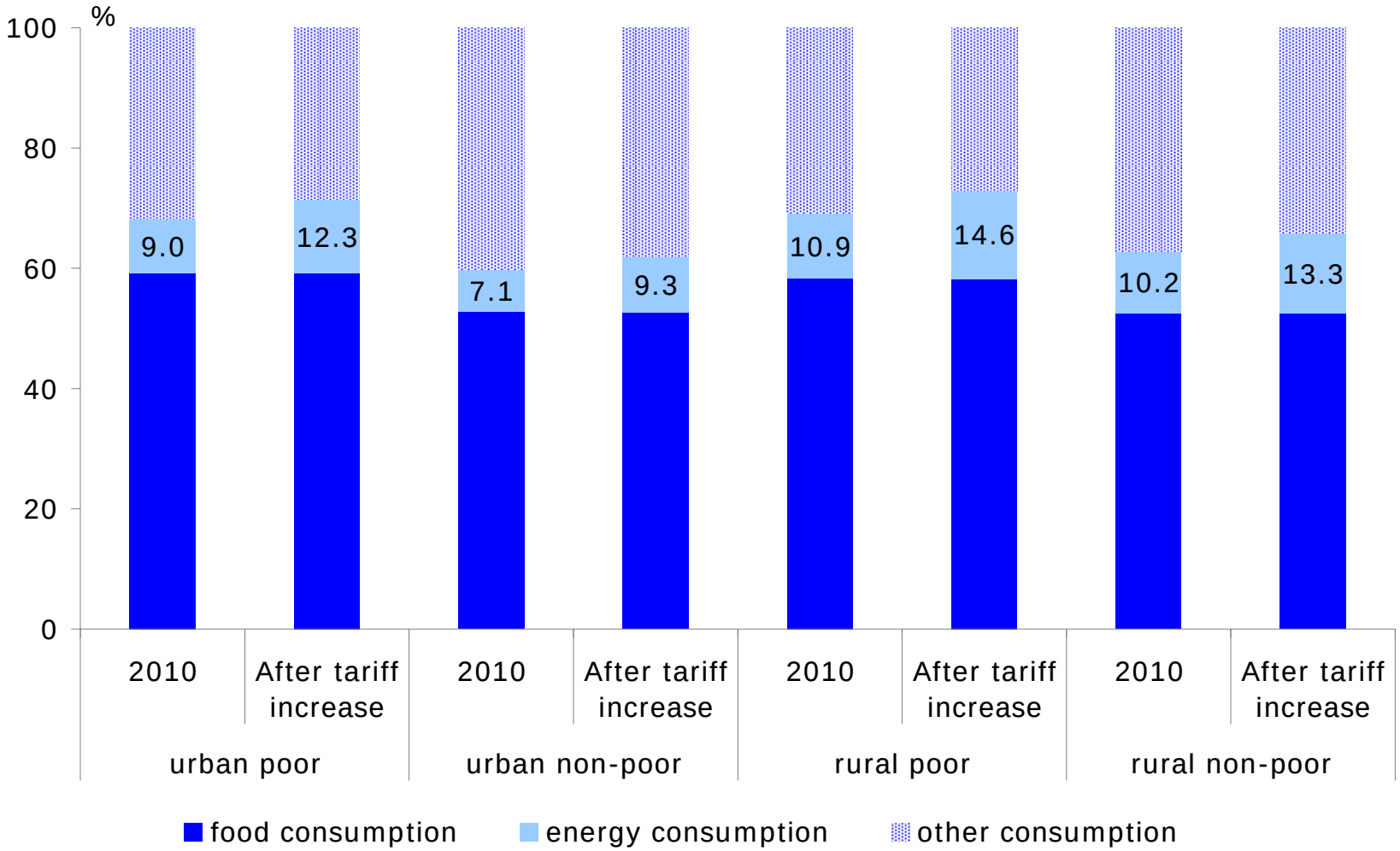
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2. Impact on households‘ energy cost

- The assumed tariff increase for households and heating companies will translate into higher energy bills
- In 2010 the average household spent 7% of its total income on energy expenditure such as gas, heating and electricity tariffs – the equivalent of UAH 198 per months
- We estimate that, following the simulated tariff hike, private households need to spend an additional UAH 64 per month on energy-related spending
- This represents a 32% increase compared to the base-scenario (without the tariff increase)
- Consequently, the average household would have to spend 9.8% of its income on energy related expenditure following the tariff rise

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Impact on energy cost differs among income groups



Conclusion: As expected, p*oor households are effected more than non-poor*

**Again, we simulate a 50% increase of gas tariffs for both households and heating companies*

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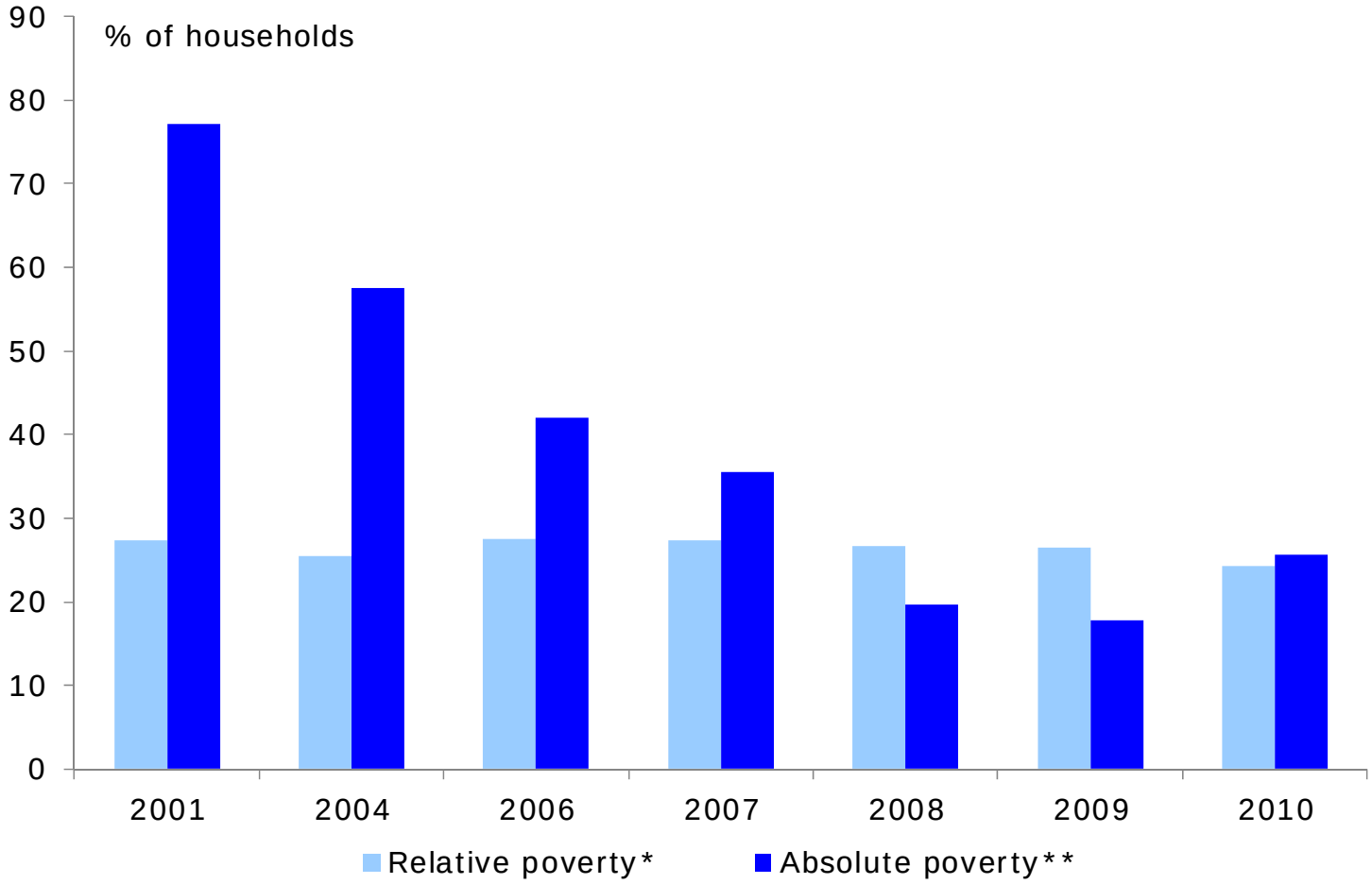
3. Impact of gas price increase on poverty

- Protecting the poor from the effect of rising gas and energy prices is a legitimate objective
- Poverty can be measured in different ways
  1. Absolute poverty: How many people live below the subsistence minimum?
  2. Relative poverty: How is the income distributed. Specifically, what is the share of population that has income below 75% of median of conditional expenditures?
- The data show that between 2001 and 2010 absolute poverty declined primarily due to increasing minimum pensions and wages to the subsistence minimum level (see chart on next page)
- Indeed, while in 2001 almost 80% of households had income below the subsistence minimum, this share fell below 30% in 2010
- Relative poverty, however, remained rather unchanged indicating that the income distribution has not changed
- Question: How will the assumed gas price rise affect incomes and poverty?

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Poverty incidence shows falling trend

- Absolute poverty declined primarily due to increase in minimum pensions and minimum wages to subsistence minimum level



*Income below 75% of median conditional spending,
** Income below general level of subsistence minimum

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3. Impact of gas price increase on poverty

- We have modelled how the assumed gas tariff increase affects the number of people in poverty *(see for more details Betliy, Movchan, Poverty and social impact analysis on increases natural gas prices and selected social guarantees in Ukraine, UNDP, 2011)*
- As expected the results show that absolute poverty will increase following the gas tariff increase
- On average we expect a 4.5% increase in the number of households under the subsistence minimum in the long term
- However, relative poverty is likely to decline by 4.9% due to a reduction in income inequality
- Urban poor suffer the under the current social welfare system. Their welfare is likely to decline by 6.5% in the long-run

Conclusions:

1. The simulated gas tariff increase will increase poverty
2. As the gas tariff increase hurts the poorest households the most, there is a need for effective targeted social assistance

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4. Social welfare system in Ukraine

- To recap: Our modelling results suggest that the current system will not prevent poverty from increasing following the gas tariff rise
- This raises two questions:
  1. What social security measures are currently in place to mitigate the impact of rising gas tariffs?
  2. Are these instruments likely to protect the most vulnerable from higher energy cost?

1. Existing social welfare programmes

a) <u>Low-income family allowances</u>

- Aimed at helping families in extreme poverty
- Provided to families with income below the guaranteed minimum income

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4. Social welfare system in Ukraine

b) Social welfare measures aimed at helping Ukrainians pay for housing and utility services consisting of:

1. Housing and utility subsidies
   - Main instrument currently in use to shield private households from high energy bills
   - Provided to households with housing and utility bills above 15% of income (10% for households consisting only of working unable individuals)

Other, less relevant, programmes:

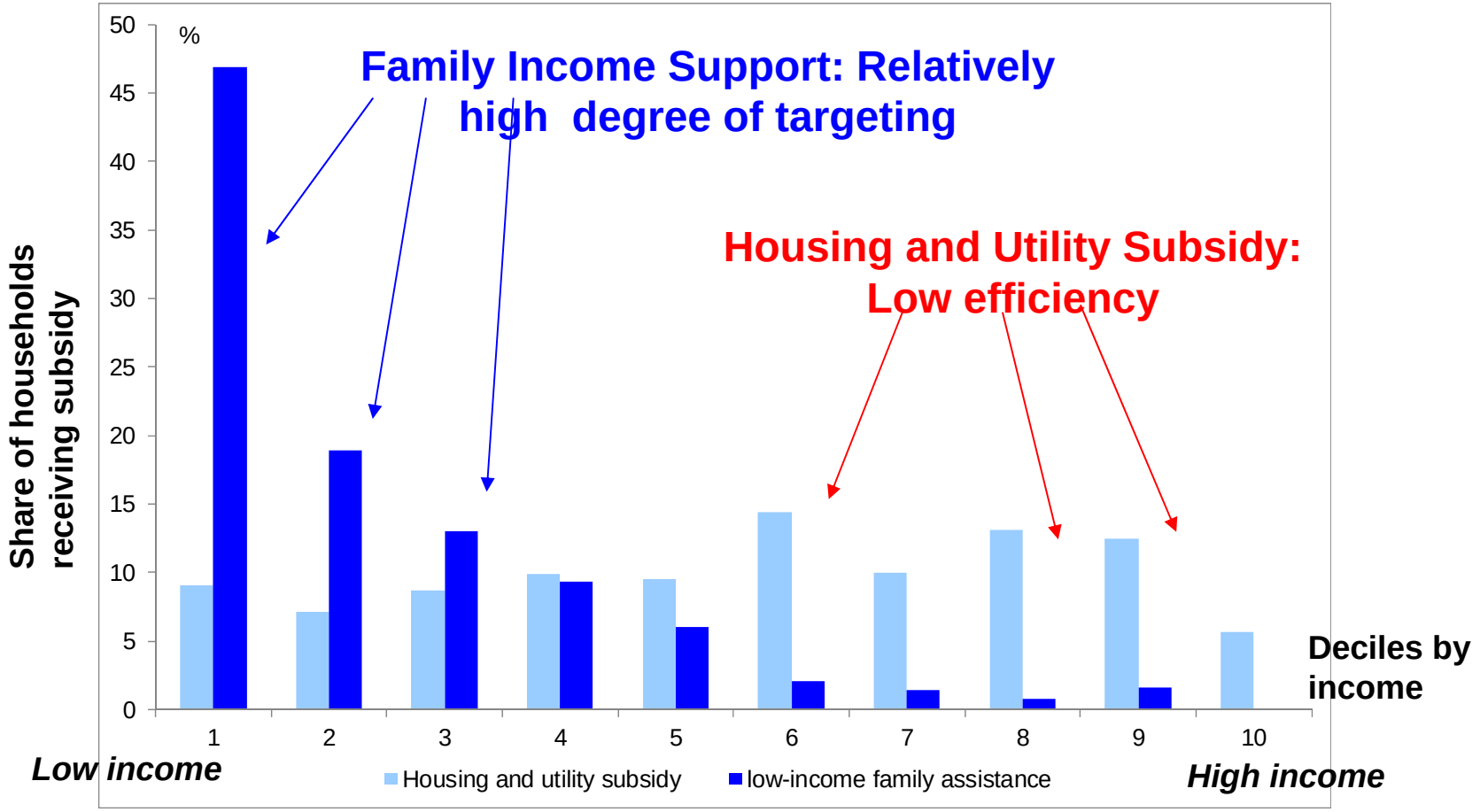
1. In-kind household privileges
   - no means-testing, arbitrarily provided to different categories of population
2. Subsidies for liquefied gas and fuel purchase
   - Subsidy is granted in cash to eligible households during heating season
   - Low overall support and concentrated in rural areas

Conclusion: *Low Income Family Support* and *Housing and Utility Subsidy* are the two main instruments to protect the poor from gas tariff increases

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How effective are the two welfare instruments?

Comparison coverage of ‘Family Income Support’ and ‘Housing and Utility Subsidy’

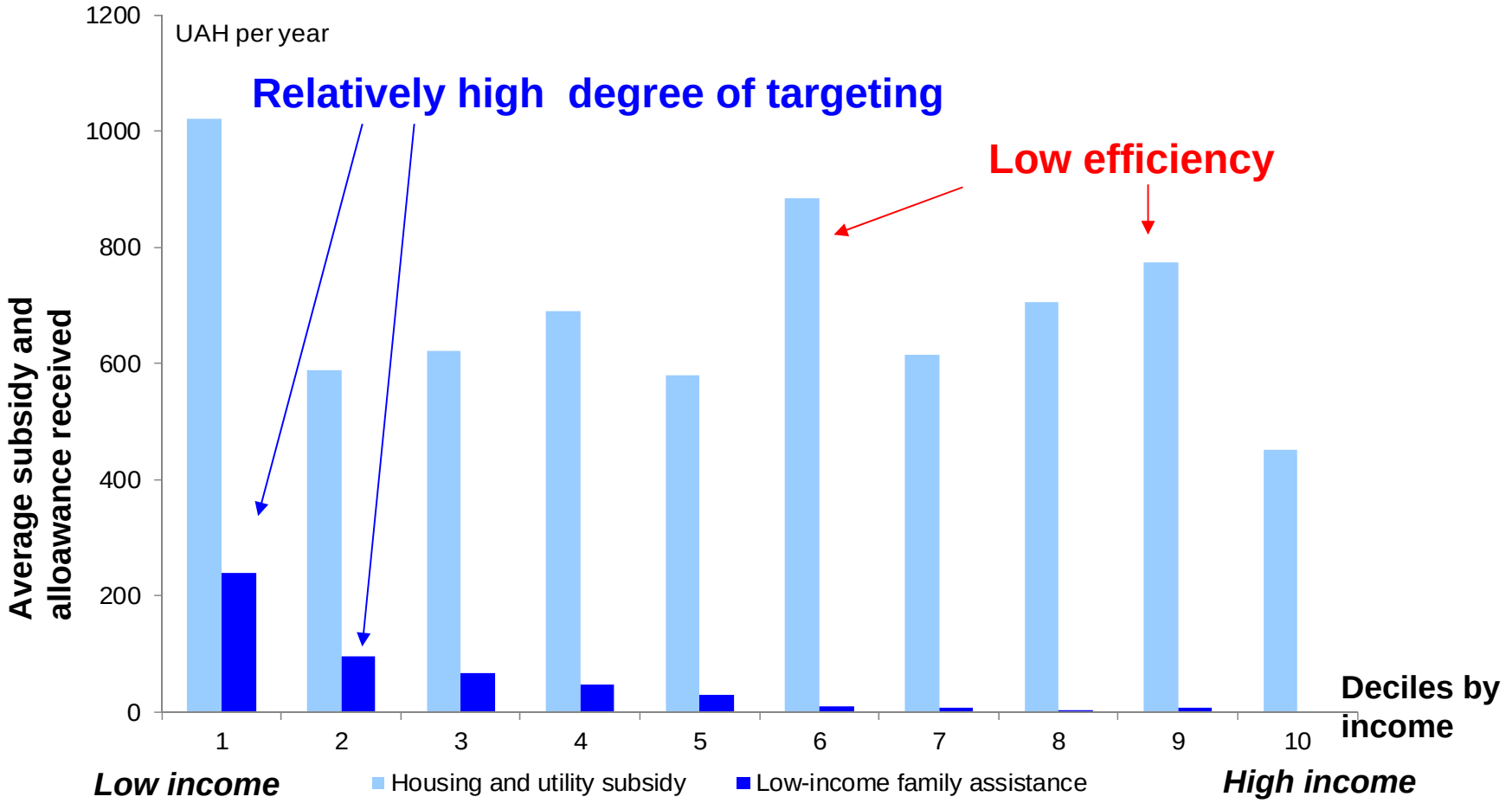


<u>Conclusion:</u> Housing and Utility Subsidy largely un-targeted, benefiting the middle class and high earners

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Family income support well target but low level

Family Income Support vs. Housing and Utility Subsidy: Average subsidy and allowances received



Conclusion: Level of Familiy Income Support too low to protect vulnerable households

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4. Social welfare system in Ukraine

Our analysis of the current social and welfare system shows:

1. Gas price increase will result in higher fiscal spending for Housing and Utility Subsidies of around USD 0.6-0.9 bn per year
2. However, our estimates show that this extra spending does not prevent poverty from rising
3. *Housing and Utility Subsidies* are relatively high, but badly targeted and also benefit middle class and high income households
4. *Low-income Family Allowance* is much more targeted and efficient in tackling poverty, but its low level means poorest households are not sufficiently protected from a gas price rise
5. Conclusion: Current system expensive and fails to protect the most vulnerable from tariff increases

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4. Social welfare system in Ukraine

Recommendations:

- Government to combine Housing and Utility Support and Low-income Family Support into one instrument
- Households are eligible for new social welfare program if their per capita expenditure net of housing and utility payments are lower than a certain threshold
- Resulting instrument would be much more effective as it is targets only low income households
- Cost for government likely to be lower even if level of subsidy for those entitled will be increased
- Combining programmes should lower administrative cost
- Government could announce increase of Low-income family assistance as support measure in context with gas tariff increase

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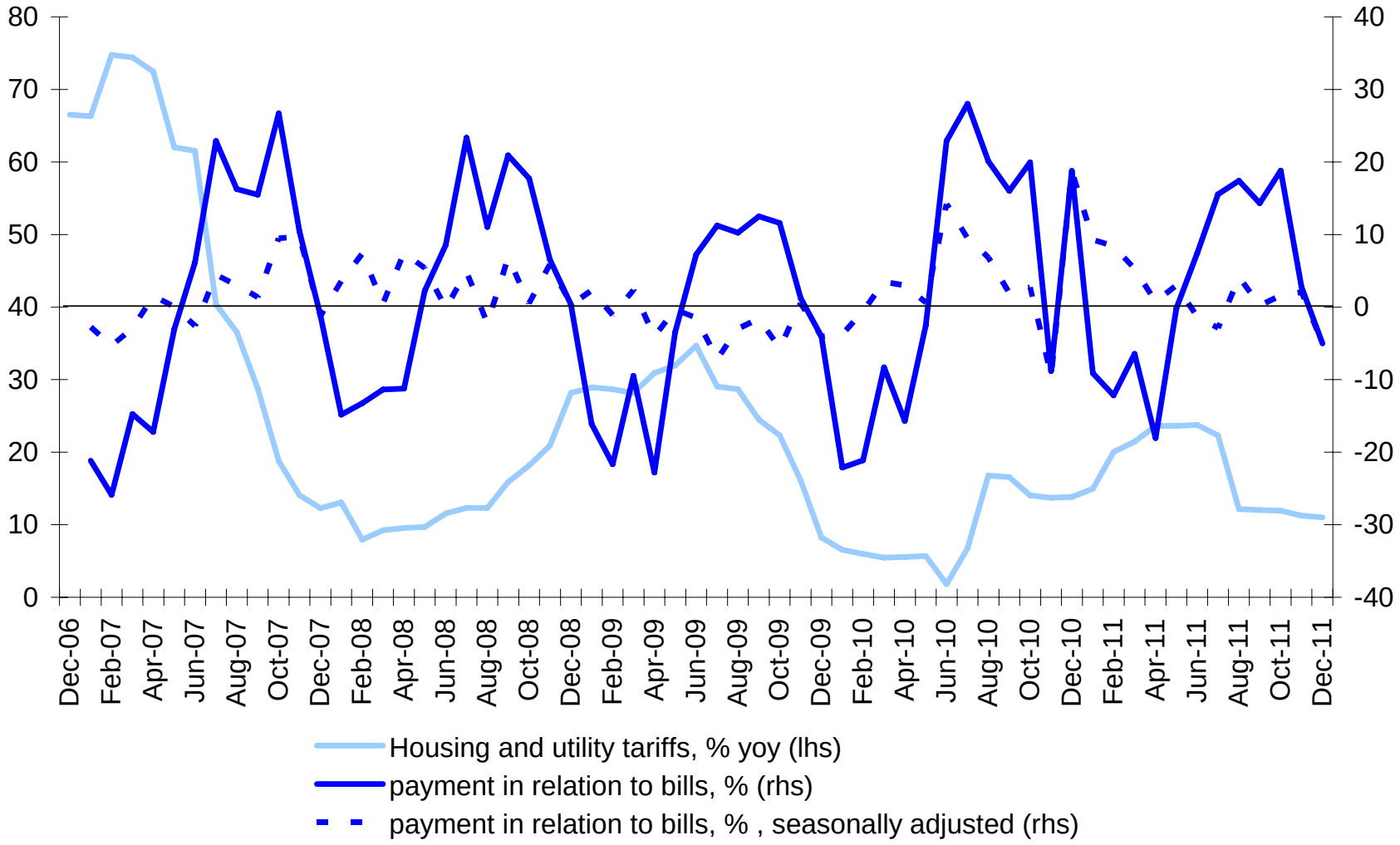
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Payment morale seasonal but overall trend is high

- Measuring payment discipline is difficult due to a lack of data
- We define payment discipline as payments made compared to bills outstanding
- The available data suggest that payment discipline is highly seasonal
- Some consumers pay off the payment arrears from the heating season during the warmer months when heating cost are low
- The overall trend is stable and suggests high payment discipline
- There is also no clear evidence that tariff increases affect payment morale
- Therefore, increases in gas prices will likely lead to higher revenues for utility providers and Naftogaz

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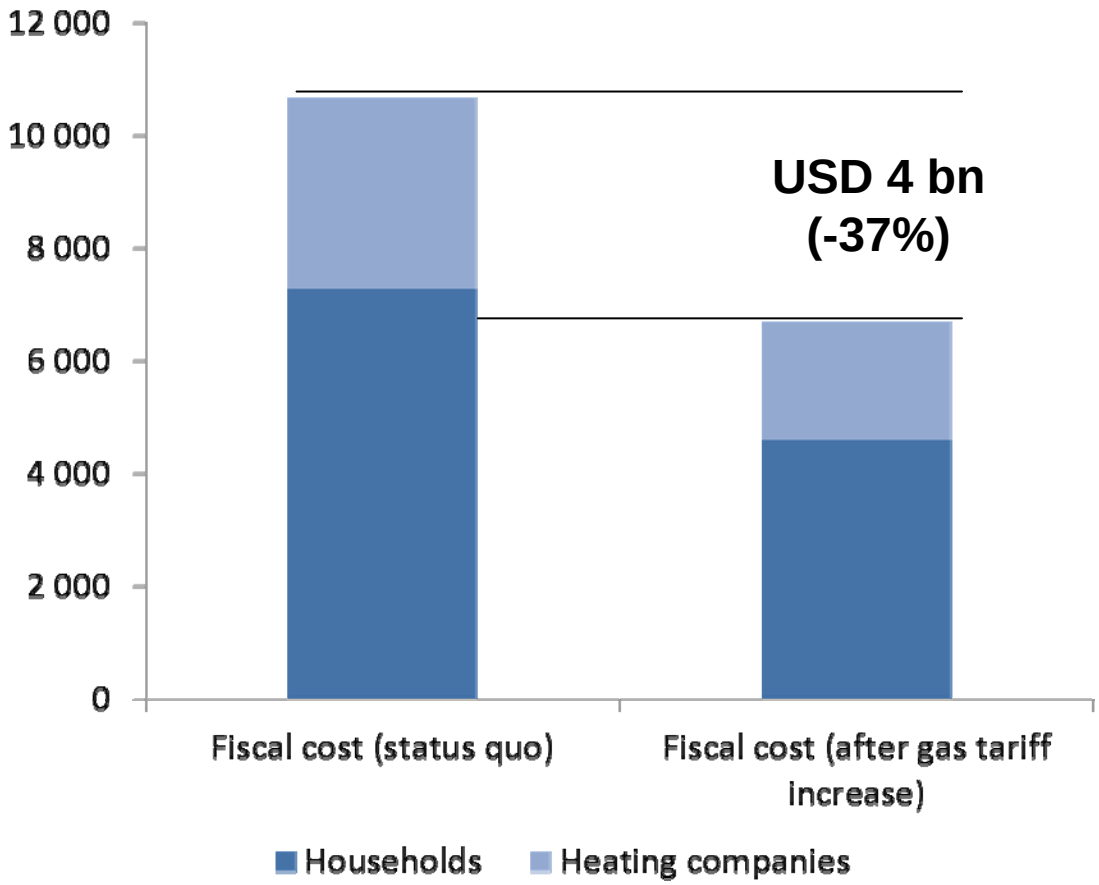
Payment morale is good and higher gas prices…



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…will reduce the fiscal burden on the government

Current annual cost of subsidising gas tariffs, USD m



- The estimated cost of selling gas to households and heating companies below cost recovery levels is USD 10.7 bn per year (*see PP/02/2012*)
- Adjusting gas tariffs would reduce the need to subsidise Naftogaz losses
- We estimate that the government could save around USD 4 bn per year at current import cost following the simulated gas tariff increase

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Overall impact likely to be positive

Increasing gas tariffs for households and heating companies would result in

- Lower energy consumption and higher revenues for the Naftogaz and, thus, lower fiscal expenditure (positive fiscal effect)
- But require higher fiscal expenditure to cover additional Housing and Utility Subsidies (negative fiscal effect)

⇨ The simulated tariff increase is likely to significantly reduce the net financial burden to government

Impact	**Value** (USD bn per year)
Reduced cost of subsidising Naftogaz	+4.0
Increased social welfare cost	-0.6 to -0.9
Overall impact on government finances	**+3.1 to 3.4**

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7. Key policy recommendations

1. Increase of gas prices is inevitable
2. Universal subsidies through discounted housing and utility tariffs, including gas prices, are expensive and fail to protect the poor
3. Poor households should be protected via targeted social welfare programmes
4. Housing and Utility Subsidies should be means tested
5. It would be beneficial for the Government to combine the two programmes into one
6. Non-targeted housing and utility privileges should be gradually abolished
7. Additionally the government should support households with reducing their gas consumption (i.e. support for efficiency measures)

Main conclusion: The impact of the gas tariff increase is largely positive. To make it even more beneficial and reduce social tensions the government should increase the effectiveness and efficiency of its housing and utility support programme.

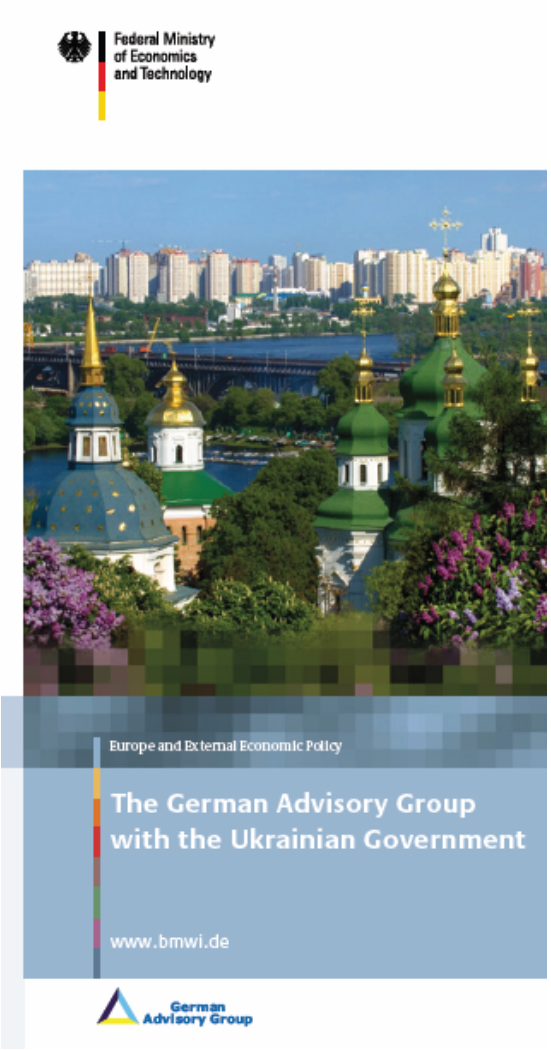
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Contacts

Oleksandra Betliy
betliy@ier.kiev.ua

Jörg Radeke
radeke@berlin-economics.com

German Advisory Group
c/o BE Berlin Economics GmbH
Schillerstr. 59, D-10627 Berlin
Tel: +49 30 / 20 61 34 64 0
Fax: +49 30 / 20 61 34 64 9
E-mail: info@beratergruppe-ukraine.de
www.beratergruppe-ukraine.de



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