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*Modifying Energy Subsidies  
in Oil and Gas Exporting Countries*

Dr. Roman Zyttek

Middle East and Central Asia Department

International Monetary Fund

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# Outline

- Theory
  - Defining & Measuring Subsidies
  - The Essence of the Reform
  - Why is the Reform so Difficult to Initiate
  - Design Issues
- Frame, Prepare, Implement, and Support the Reform
  - Framing the Reform to Win Public Support
  - Supporting Economic Policies
  - Post-implementation Challenges
  - Interdisciplinary Approach
- “Knowledge” Sector Opportunities

# Defining & Measuring Subsidies

Key Terms:

Production cost

Price

Opportunity cost (revenue)

Hydrocarbon rent

Measuring & magnitudes

# The Essence of the Reform

Visualize the rents

Visualize related opportunities

Encash

Recycle the cash

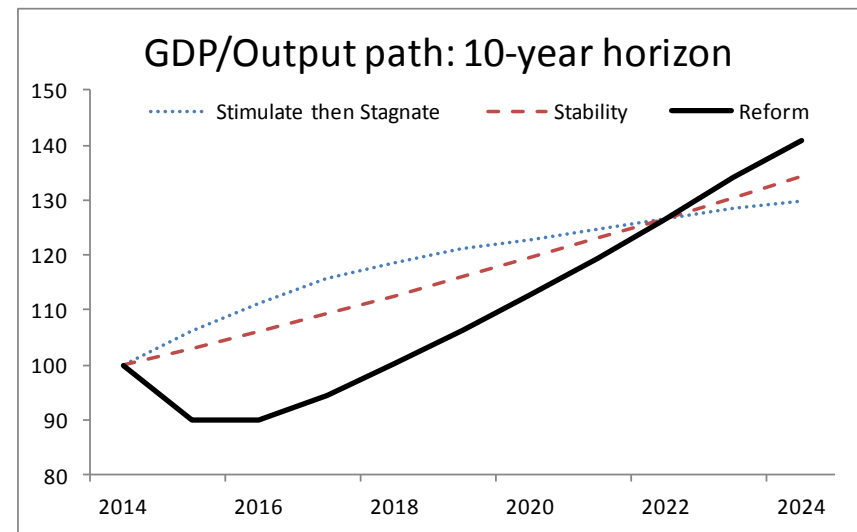
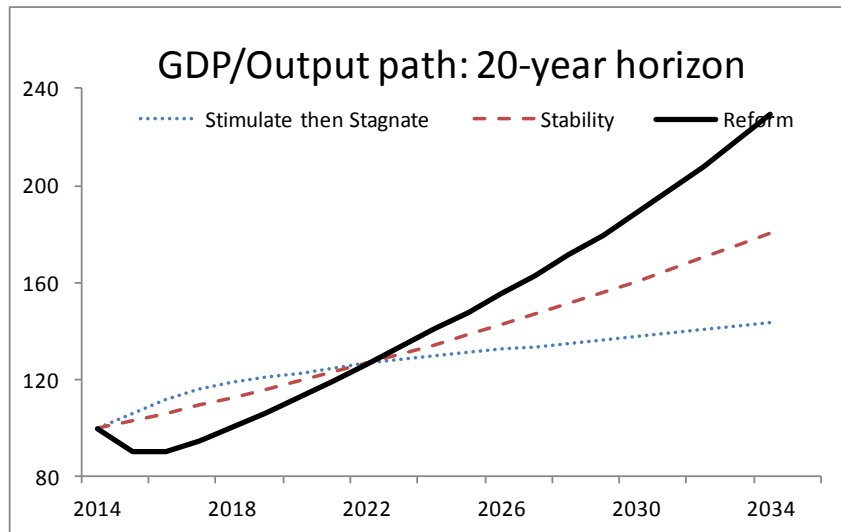
(ideally to consumers)

# Why are Reforms Difficult to Initiate

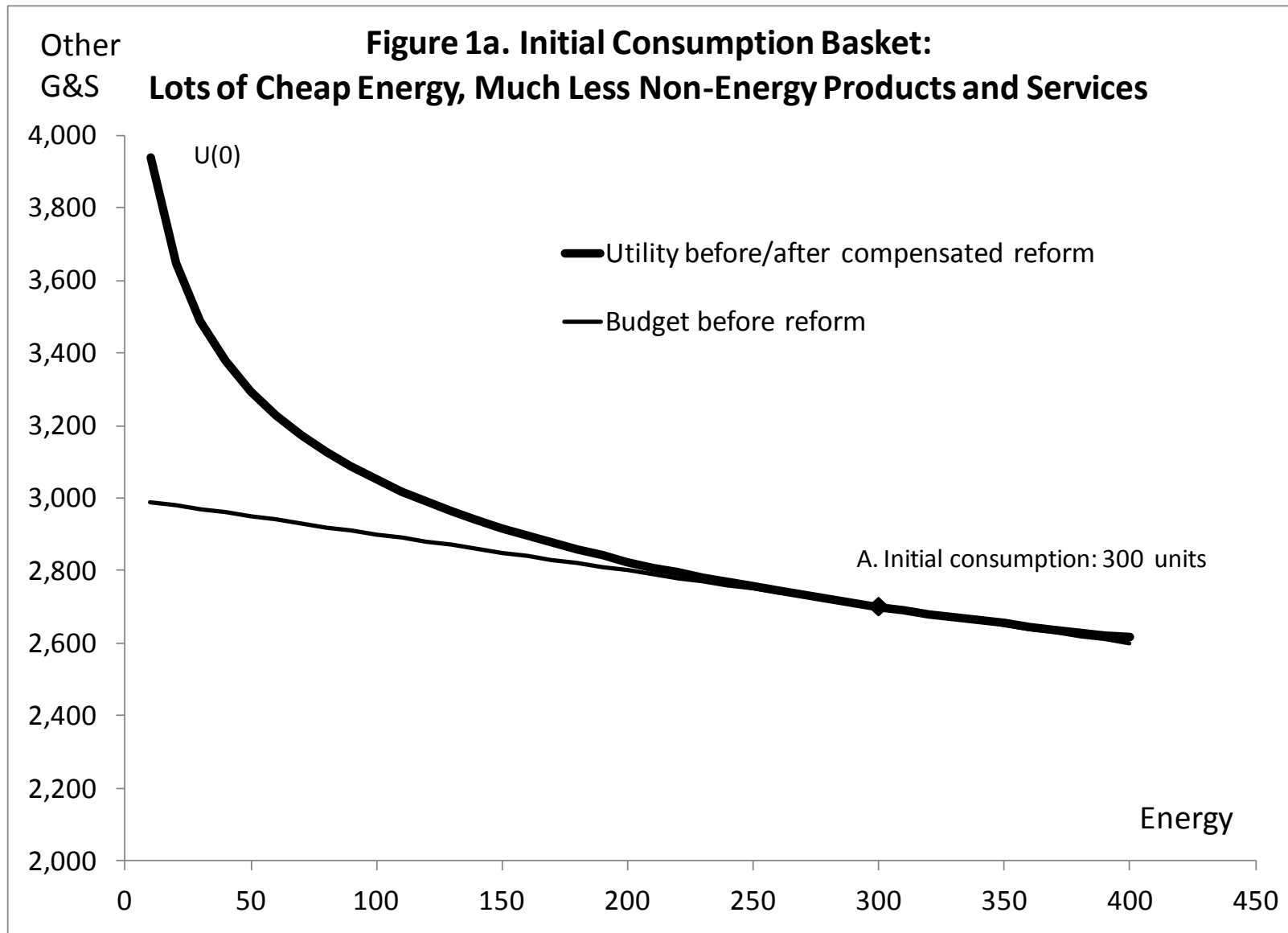
## Horizon and Policy Discount Rate

Mostly Unappreciated Factors in the Subsidy Debate

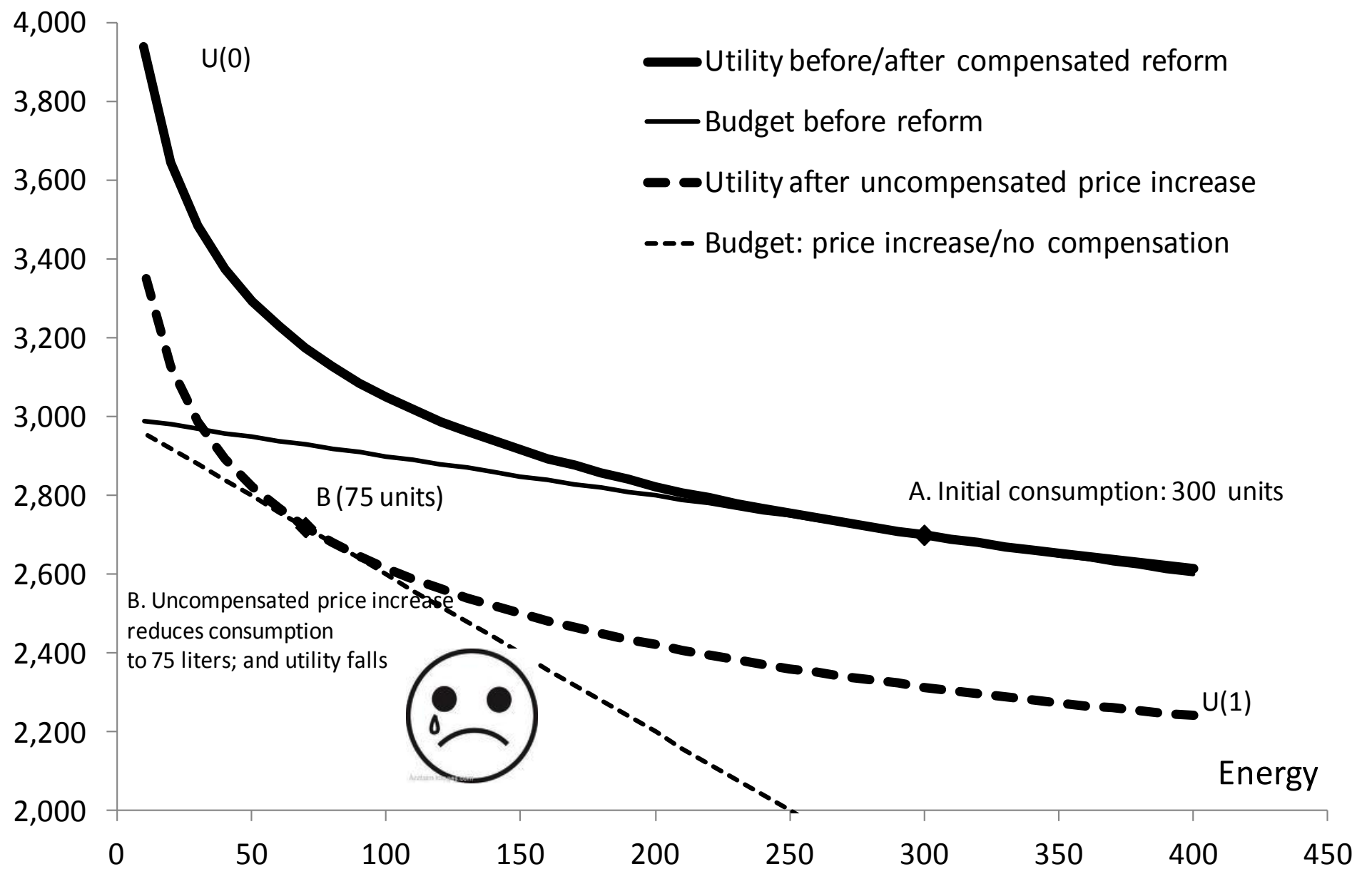
Hyperbolic Discounting Adds to the Challenge



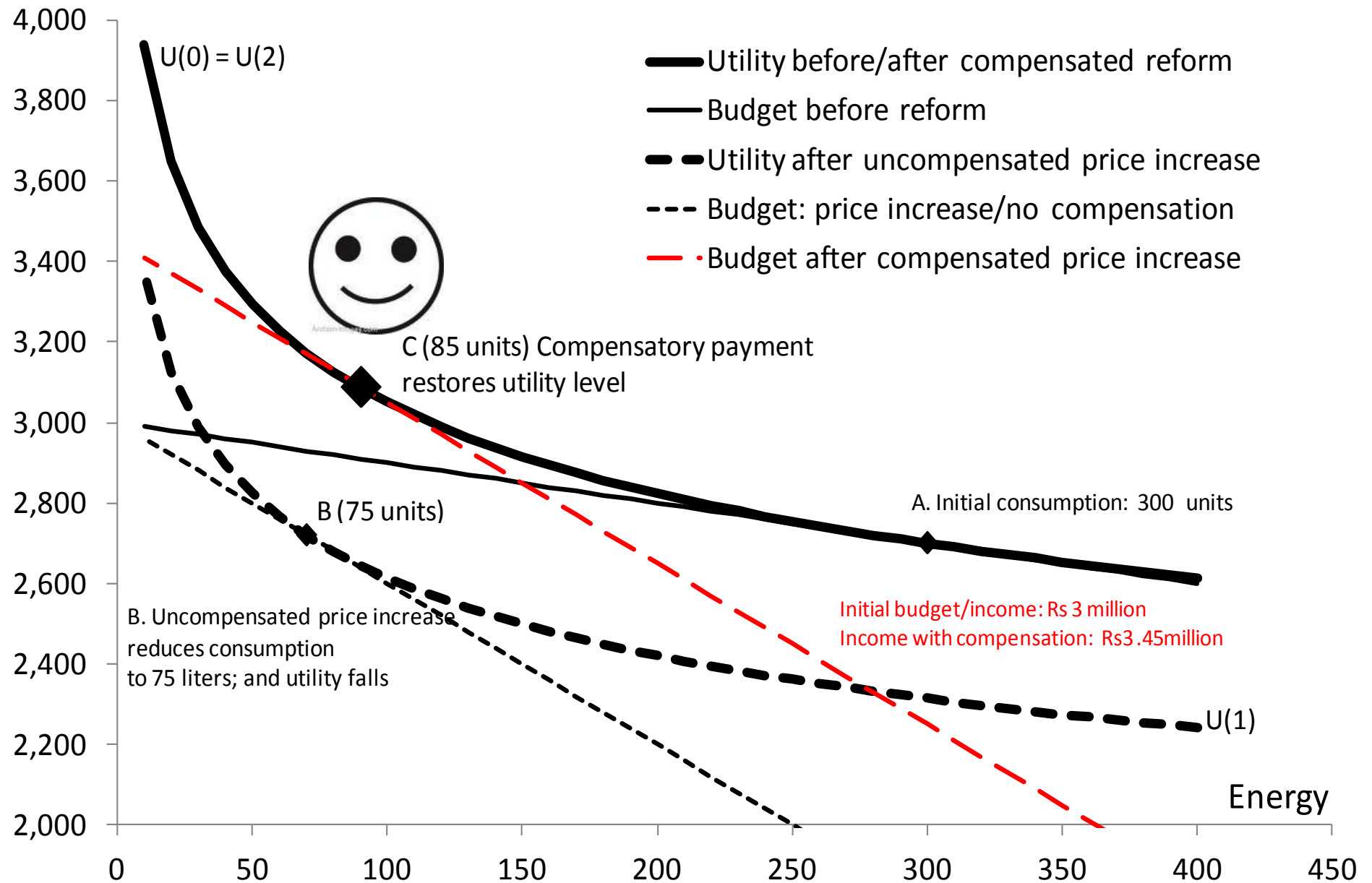
# Microeconomics of Subsidy Reform



**Figure 1b. Impact of Uncompensated Energy Price Increase on Consumption: Less of Everything, including Happiness**



**Figure 1c. Impact of Fairly Compensated Price Increase on Consumption: Somewhat More Energy and Much More Non-Energy Goods and Services**





# Economics of Rent Distribution

## Energy priced at **extraction costs**

- *Producer*
  - Lower (accounting) energy costs
  - Lower wages
  - Lower production costs
  - Energy intensive input and output profile
- *Consumer*
  - Lower accounting living expenses
  - Lower wages
  - Demand ...
    - High for cheap “energy”
    - Low for other G&S
- *Economy*
  - Output mismatched with global demand patterns

## Energy priced at **opportunity cost**

- *Producer*
  - Full energy cost
  - Higher labor costs
  - Full production costs
  - Energy efficient input and output profile
- *Consumer*
  - Higher living expenses
  - Higher wages allow ...
  - Diversified demand
    - Lower for “energy”
    - Higher for other G&S
- *Economy*
  - Output converging towards meeting global demand

# The Design Issues

## Government-centered

- Rents captured by the budget
- Spent on government priorities
- Government assistance to “most vulnerable”
- Supply driven economic model
  - Increase in social spending
  - Increase in subsidies to firms
  - Selective private capture likely
  - Weakens domestic competition & slows adjustment and growth
  - Reform benefits may unravel

## Household-centered

- Rents go directly to all households
- Households decide how to spend
- All nationals benefit
- Demand driven economic model
  - Increase in personal choice
  - Increase in demand-driven expenditure on education, health care, housing, other
  - Supply response to genuine demand
  - Competitive economic model
  - Promotes domestic & international competition, cost reductions, competitiveness, jobs and growth

# Marrying the Two Models

- Financial & human capital-based “welfare state” that maintains incentives?
- All rents go to households ... but use of the money is restricted
  - Rents fund individually owned, fully inheritable, savings accounts at a Sovereign Provident Fund to pay for:
    - Pensions
    - Health care
    - Education
    - Limited housing equity
    - Other major life-cycle events/needs
- Somewhat modeled on the Sovereign/National Provident Funds
- Could become much larger and sophisticated
- The rents reduce the need for payroll taxes
- Strong governance needed

Frame, Prepare, Implement & Support the  
Reform

# Typical Framing

- Reform needed because low prices reduce public revenues, affect external account, economic growth, climate change, income distribution, labor markets, economic efficiency ...
  - Vague concepts for most families
  - Reform promises to **take away** benefits, welfare
  - In exchange for vague promises, mainly for the poor

# Desired Framing

- Reform needed because:
  - Reform diversifies my choices (consumer & producer)
  - Reform will make me better off, is good for me
  - Reform will energize the economy, my/kids prospects
  - Individual/family focused
  - “Win-win” perspective

# Winning Public Support

- Single Objective
  - Economic efficiency (welfare gains)
  - Social fairness is a distant by-product
- Clear, simple, and complete design
- Planning & preparations
- Communication & marketing
- Reinforcing the pricing mechanism
  - Lessons from behavioral economics

# Supporting Economic Policies

- Consistent mix of supporting policies
  - Fiscal
  - Monetary
  - Trade
  - Exchange rate
- Oil/gas exporters can afford large buffers
- Structural policies
  - Pruning of inefficient enterprises, even sectors
  - Sprouting of new enterprises and sectors



# Post-Implementation Challenges

- Households
  - Source of new, more diversified demand
- Corporate sector
  - Adjustment of output, technologies and inputs
  - Hard budget constraint essential
  - Pragmatism needed
- Governments & public services
  - Funding of the higher energy bill
- Financial sector
  - Adjustment to new environment

# “Knowledge“ Needs & Opportunities

- The reform can offer tremendous opportunities
  - Pre-reform planning & marketing
  - Design of the rent calculation and distribution formulas and methodologies
  - Monitoring reform implementation and rent distribution

# “Knowledge“ Needs & Opportunities

- Energy sector reforms
  - Modernizing power generation
  - Expanding and modernizing distribution of liquid fuels
  - Wholesale electricity markets
  - Individual user metering

# “Knowledge“ Needs & Opportunities

- Financial and corporate sector reforms
  - Old business restructuring
  - New business creation
  - From bank finance-dominated financial sector to private equity/venture capital packages of skills, networks, and money
- Asset management to manage the newly found cash income and wealth

# Conclusions

- Understanding energy subsidies
- Understanding the reform objective
- Framing the reform
- Impeccable and complete design
  - Linking household compensation to energy sector profitability?
  - Linking compensation to entitlement reform?
  - Linking the reform to tax reforms?
- Meticulous planning & preparations
  - Centralized decision making
  - Putting the needed institutions in place
- Painstakingly open and transparent marketing
- Supporting economic and structural policies
- “Discipline, Clarity, Trust” (DCT) in reform implementation <sup>1/</sup>
- Pragmatism

<sup>1/</sup> The DCT principles of good economic policy were developed by Peter Blair Henry, 2013, *“Turn-Around: Third World Lessons for First World Growth,”* Basic Books, New York.

# Further Information and Contact

Two papers documenting Iran's reform experience:

- “Iran - The Chronicles of the Subsidy Reform,” 2011, IMF Working Paper No. 11/167, available at:

<http://www.imf.org/external/pubs/cat/longres.aspx?sk=25044.0>

- “Targeted Subsidy Reform In Iran” Chapter 1 in *Islamic Republic of Iran Selected Issues Paper*, IMF Country Report No. 14/94, available at:

<http://www.imf.org/external/pubs/cat/longres.aspx?sk=41464.0>

- “Energy Subsidy Reform: Lessons and Implications,” Authors/Editors: Benedict J Clements, David Coady, Stefania Fabrizio, Sanjeev Gupta, Trevor Serge Coleridge Alleyne, Carlo A Sdravovich, 2013, available for purchase at:

<http://www.imfbookstore.org/ProdDetails.asp?ID=ESRLIEA&PG=1&Type=BL>

For further information:

Roman Zytek

[rzytek@imf.org](mailto:rzytek@imf.org)