

# Automatic Fuel Pricing Mechanisms

David Coady

Division Chief

Fiscal Affairs Department

International Monetary Fund

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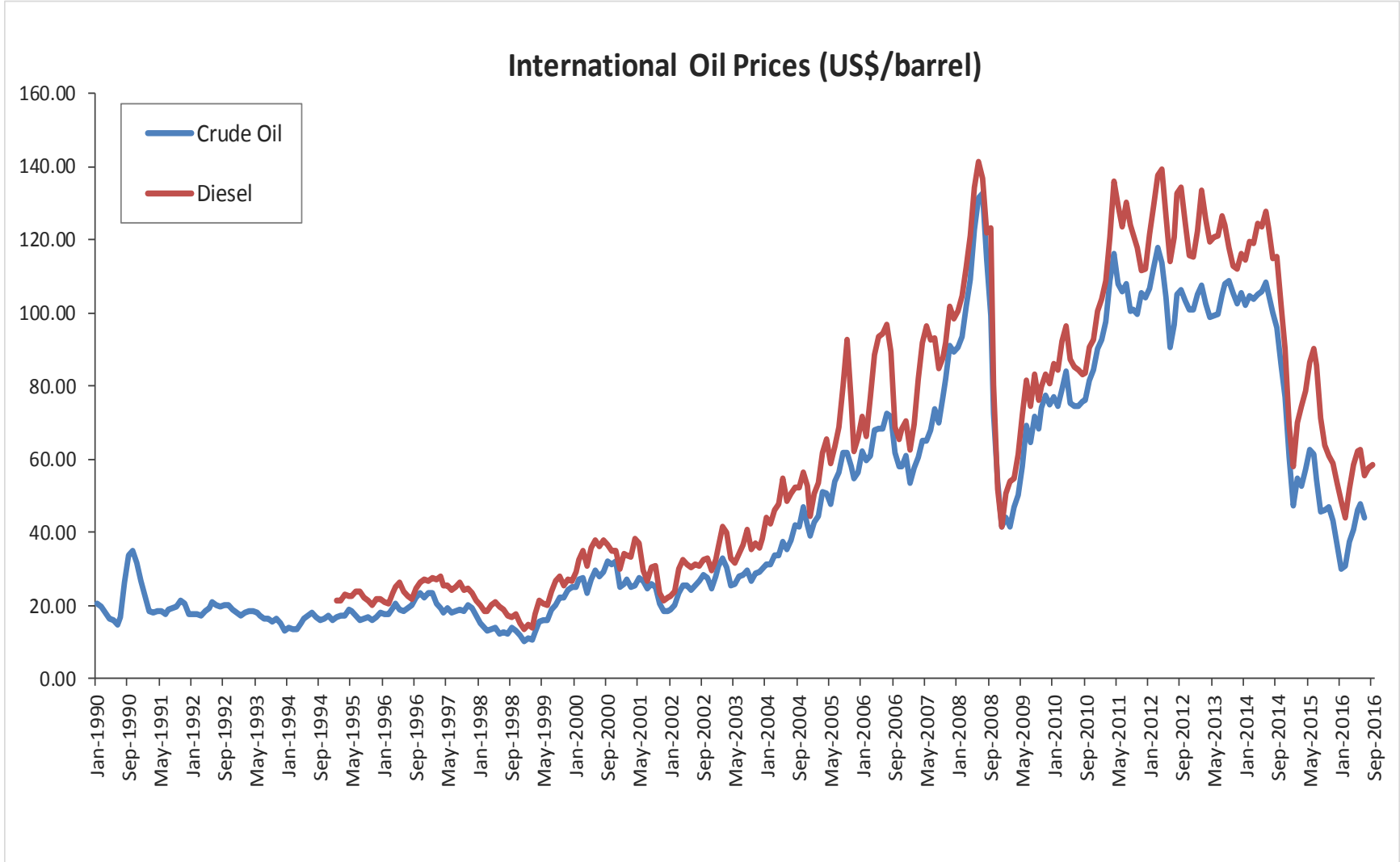
Paris, October 13, 2016

# Motivation



- Increasing volatility of international fuel prices [Click](#)
- Incomplete pass-through of international price changes to domestic consumers [Click](#)
- Ad hoc approach to pricing susceptible to recurring energy subsidies
- Typically advise adoption of AFPM to ensure full pass-through and protect fiscal [Click](#)
- [Click to Slide 6 - Objectives of AFPMs](#)

# Increasing volatility in international oil prices





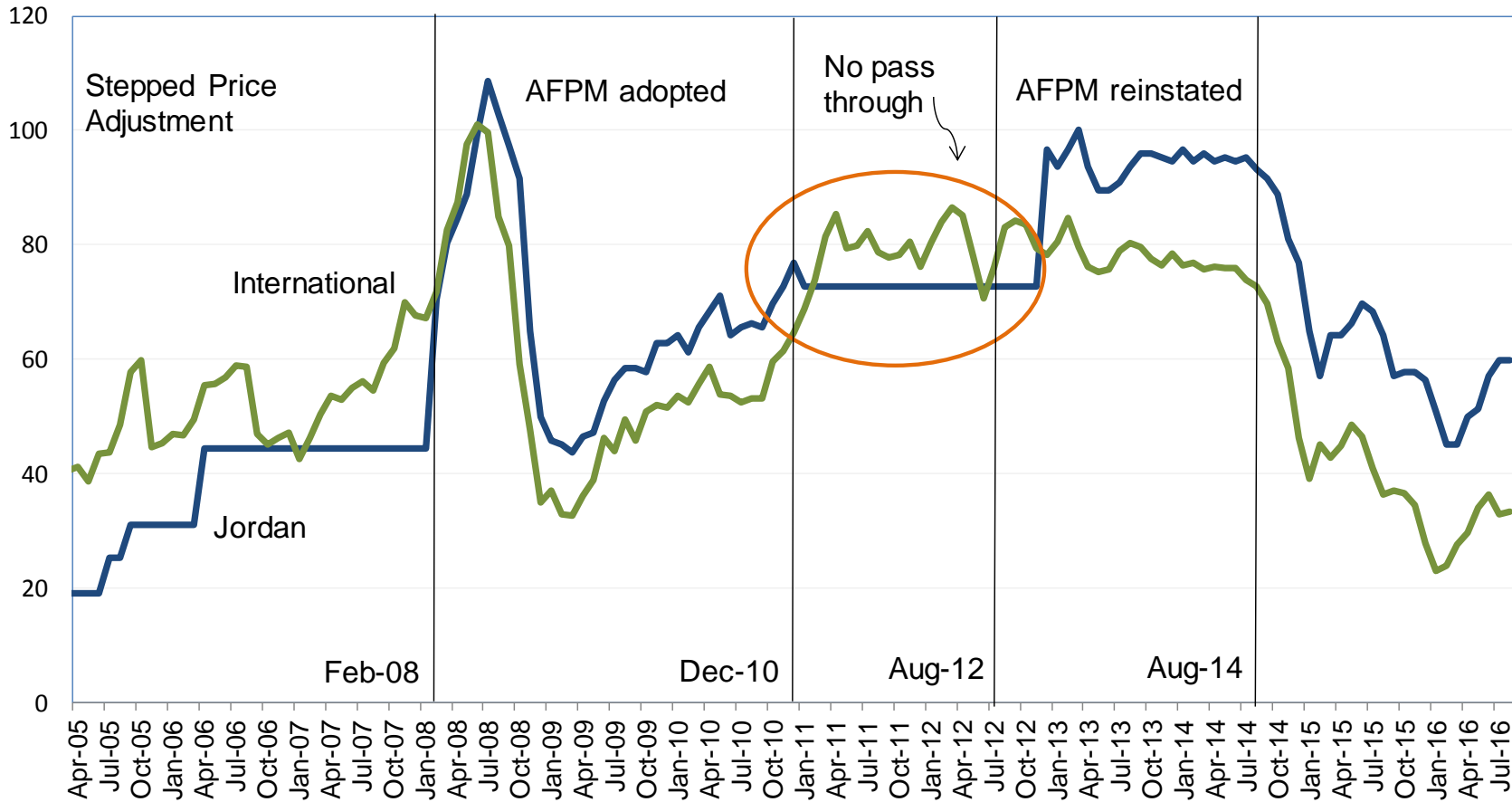
# Incomplete pass-through in many countries

Table 1. Median Pass-Through Coefficients by Country Groups and Over Time

	Median Pass-Through Coefficients					Average
	Jan 2005- Dec 2006	Jan 2007- Jun 2008	Jul 2008- Feb 2009	Mar 2009- Jun 2014	Jul 2014- Dec 2014	
<b>Diesel median pass-through</b>						
Advanced Economies	143	184	164	164	106	152
Commonwealth of Independent States	221	54	31	48	26	76
Developing Asia	187	78	61	57	47	86
Emerging Europe	150	182	164	167	108	154
Latin America and the Caribbean	119	100	76	92	39	85
Middle East and North Africa	161	33	1	13	0	42
Sub-Saharan Africa	170	108	58	58	39	86
All countries	155	125	93	82	56	102

# Fuel subsidy reform & adoption of AFPM

Jordan Domestic and International Diesel Prices (In US cents per liter)



Source: Jordan Ministry of Energy and Mineral Resources, and the US Energy Information Administration.

# Objectives of AFPMs



- **Avoid recurrence of energy subsidies by ensuring full**
- **Smoothing can be formally incorporated to reduce domestic fuel price volatility and avoid sharp price increases while ensuring full pass-through over medium term**
- **Transferring responsibility to independent pricing body can depoliticize pricing**
- **Can facilitate transition to liberalized pricing**

# Designing an AFPM



- **Specify the pricing formula**
- **Adopt a timeline for updating the components of the pricing formula**
- **Establish a rule determining when and by how much retail prices are changed**
- **Consider a price smoothing mechanism to reduce short-term price volatility**

Table 1. Fuel Price Structure  
LCU per liter

		Gasoline	Kerosene	Diesel
CIF import price (1)		423	482	440
FOB price		388	447	405
Freight, insurance and fees	+	35	35	35
Taxes (2)		234	18	147
Custom duty		54	6	33
Excise		75	4	40
VAT	+	81	8	49
Other fee and charges		25	0	25
Domestic margins and transport (3)		92	65	78
Margins (distribution and retail)		55	26	40
Transport charges and fees	=	38	39	38
Pump price (LCU per liter) [(1)+(2)+(3)]		750	565	665



# Two main types of smoothing

## Price bands

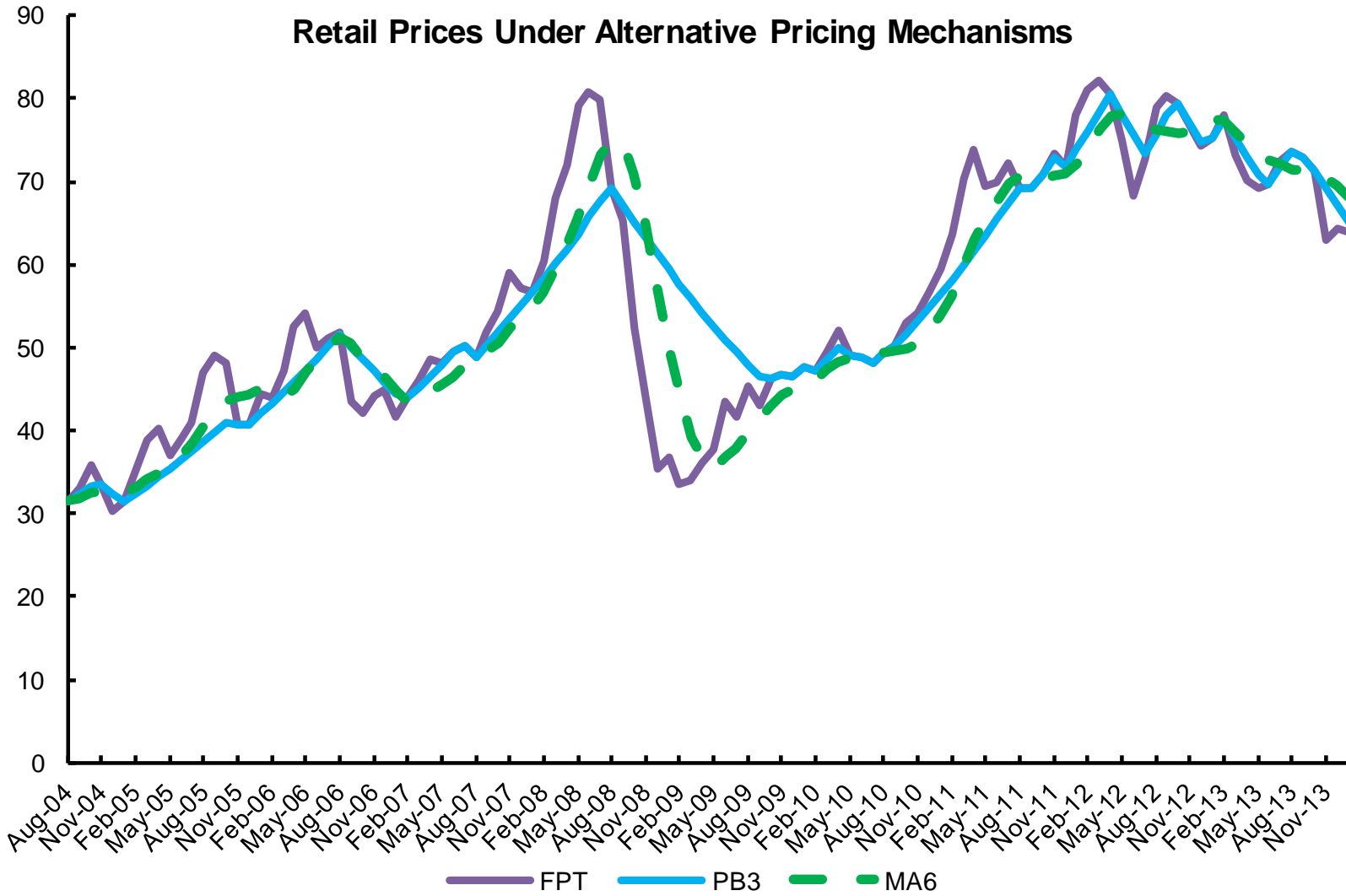
- Smoothed variable: retail prices
- Can be for instance 3, 5, or 10 percent
- Excise tax/subsidy component is the adjustor

## Moving averages

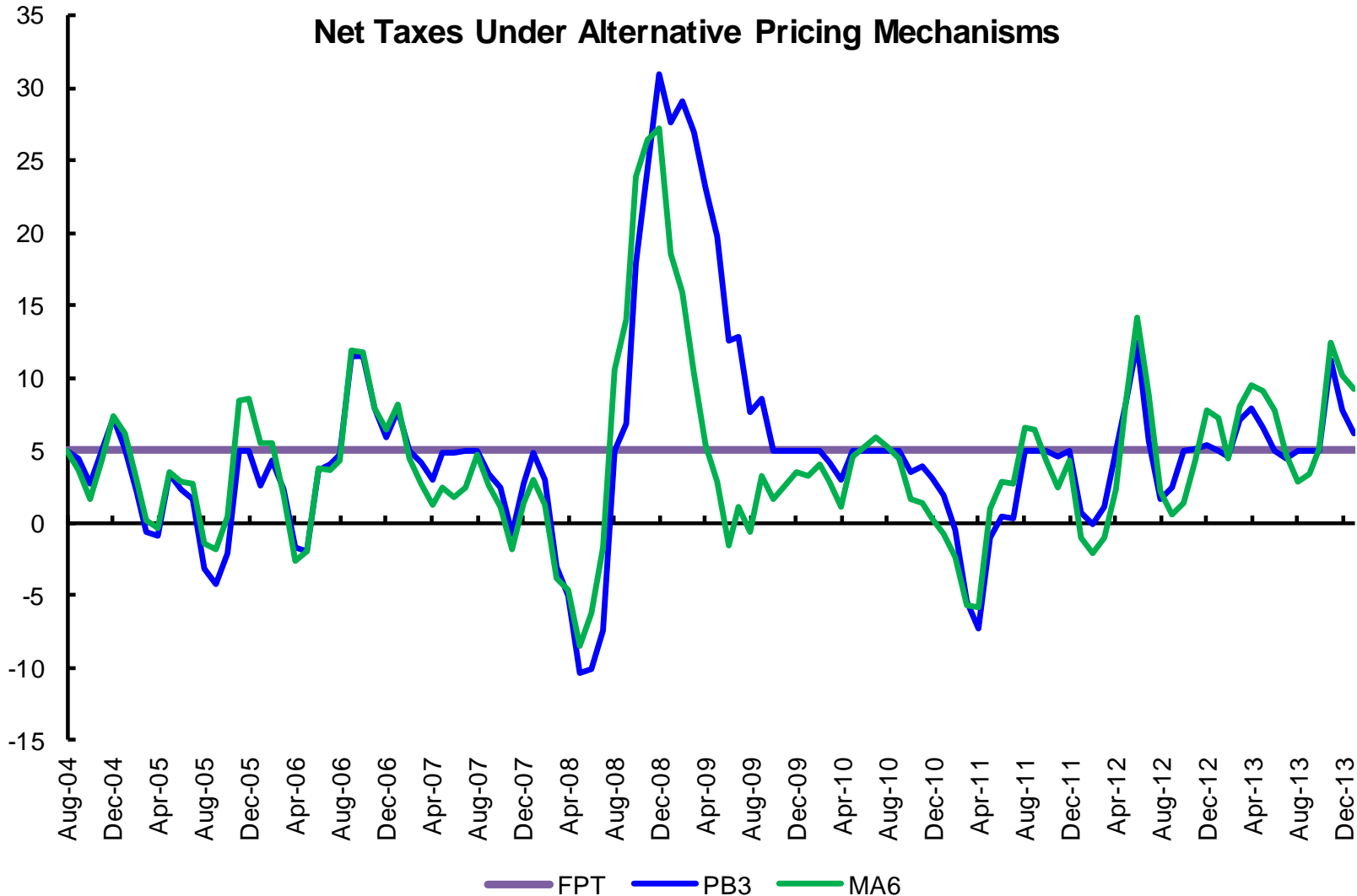
- Smoothed variable : import prices
- Can be for instance 2, 4, or 6 month moving averages
- Excise tax/subsidy component is the adjustor



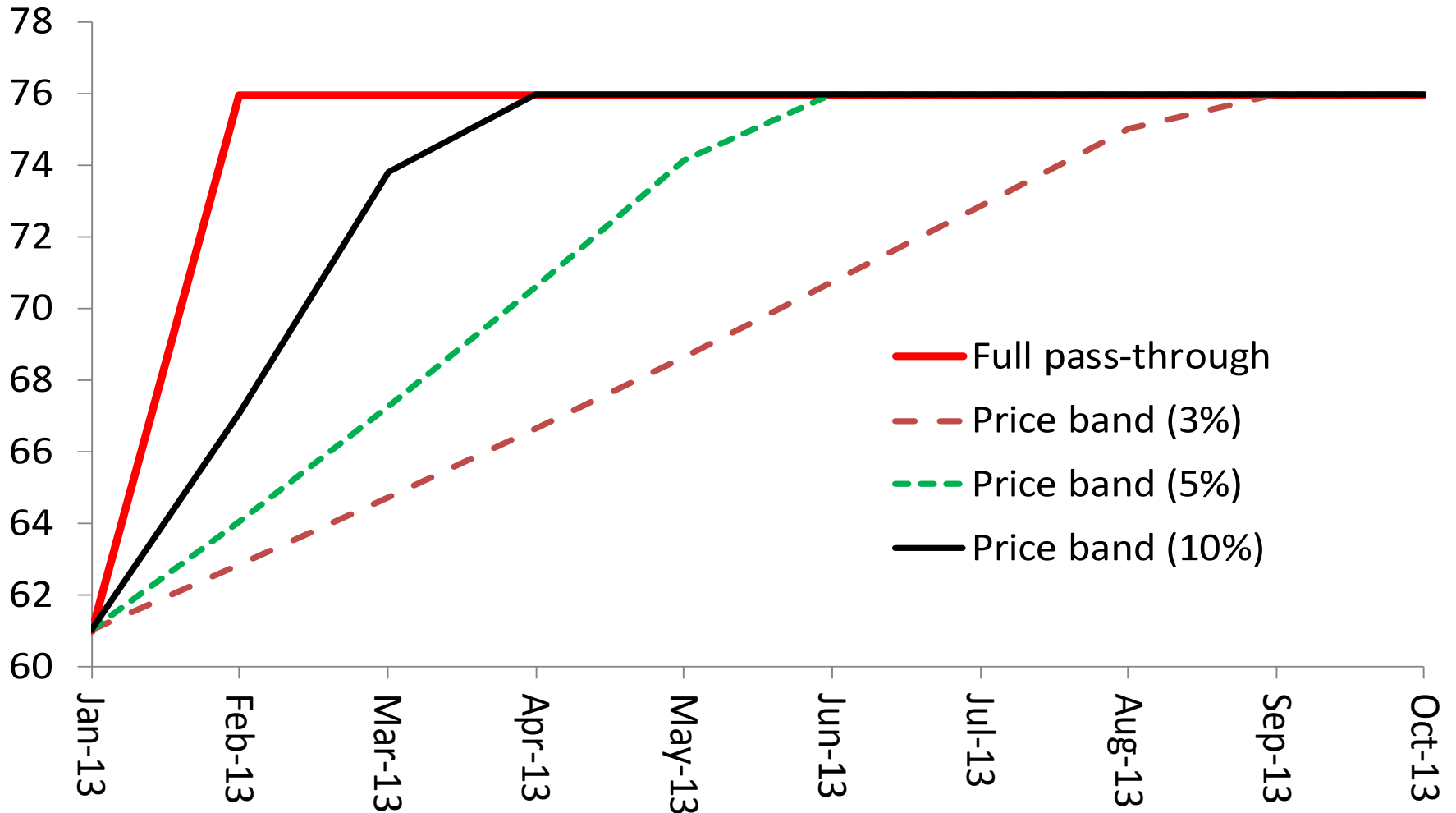
# Smoothing can reduce price volatility...



# ....but translates into fiscal volatility



# Can be adopted as part of reform strategy or at end



# Transition Strategy

- **Outline a clear timeline for reaching targeted fuel tax levels**
- **Prepare in advance for the adoption of the pricing mechanism as soon as the targeted tax levels are reached**
- **Consider creating an autonomous committee responsible for implementing the new automatic mechanism**
- **Prepare a plan for liberalization of pricing over the medium term**

# Reform Experience

- **Philippines (mid 1990s), South Africa (late 1970s) and Turkey (early 1990s) transferred implementation to independent body**
- **Philippines and Turkey implemented mechanisms as part of transition to liberalized pricing**
- **Many others have adopted AFPM more recently**
  - Jordan (2005); Mauritania (2012); Morocco (2013); Nepal (2014); Tunisia (2014); UAE (2015)
- **Number of countries have adopted mechanisms with smoothing**
  - Cote d'Ivoire; Chile, Colombia, Peru, Malawi, Mauritius, Namibia, Thailand, Vietnam
- **India and Malaysia have liberalized fuel prices in 2014**

# IMF resources



## AFPM Paper:

<http://www.imf.org/external/pubs/ft/tnm/2012/tnm1203.pdf>

## Various tools and resources available on website:

<http://www.imf.org/external/np/fad/subsidies/>

IMF Working Paper: “[How Large Are Global Energy Subsidies?](#)”

IMF Book: “[Getting Energy Prices Right: from Principle to Practice](#)”

IMF Book: “[Energy Subsidy Reform: Lessons and Implications](#)”