The role of statistics in monetary policy decision making in Morocco: The case of Real Estate Price Index (REPI)

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"Without data, you're just another person with an opinion." W. Edwards Deming
Introduction

• After the great financial crisis of 2008 the housing price becomes a centre of the interest of monetary policy decision makers

• In the absence of a measure of the evolution of housing price, the Central Bank of Morocco has launched a project of construction of real estate price index (REPI)

• During this presentation, I will try to show how a statistical measure such as the REPI was useful to strengthen the analytical capacity of the Central Bank of Morocco to conduct monetary policy
The collapse of the US real estate market was the trigger of the crisis: "subprime mortgage" to many unreliable borrowers...increase in the value of the property...exacerbate real estate cycle and result in a speculative bubble...through securitization, the crisis spread to all financial markets worldwide.

The emergence of the 2008 financial crisis brought real estate prices at the center of interest (Brief summary).
Effect on Moroccan economy...

Growth rate (% change)

- Euro Area
- US
- Morocco

Effect on Moroccan economy...

Evolution of real estate price and construction VA

Evolution of real estate price and construction VA

REPI
Construction VA

Remitence of MLA
REPI

26/07/2017
Aware of its importance, Bank Al-Maghrib has launched a project to develop REPI.
The repeated sales method was the adopted approach.
Methods used in other countries

- Germany
- Spain
- France (INSEE)
- Sweden
- US (Federal Housing Finance Agency)
How the REPI impacts aggregate demand
Real estate price plays an important role in monetary policy transmission mechanisms.
Two main aspects in the asset price channel

Asset price channel

Tobin q
the wealth effect
Correlation between REPI and economic cycle

Real Estate Price Index (REPI) and output gap

output gap
REPI
Significant causality between REPI and aggregate demand

Pairwise Granger Causality Tests
Date: 05/24/17   Time: 00:03
Sample: 2007Q1 2016Q2
Lags: 1

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<th>Null Hypothesis</th>
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<td>OUTPUT_GAP does not Granger Cause REPI</td>
<td>37</td>
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How the REPI is used in the analytical framework of BAM
Analytical documents of BAM...
REPI is used in the forecasting process of Bank Al-Maghrib

• Because the monetary policy decision take a delay (6 to 8 quarters) to impact aggregate demand and inflation...

• Monetary policy needs to have a forward looking approach...

• Hence it has a Forecasting and Policy Analysis System (FPAS)...

• With a core model called Moroccan Quarterly Projection Model
REPI is embedded in the MQPM through the Tobin q and wealth effect.
REPI is embedded in the MQPM through the Tobin q and wealth effect

Domestic Demand

- Consumption
- Wealth effect
- Investment
  - Tobin q
Conclusion

• After the Great Financial Crisis of 2008, the real estate price became in the center of interest of monetary policy decision makers

• The REPI is a good example that highlights the importance of statistics to help the monetary policy decision making in Morocco

• The project of constructing a REPI in Morocco highlights also the data constrains that the economists in central banks should deal with, to support the conduct of monetary policy

• The REPI helps to deepen the understanding of monetary policy transmission mechanism in Morocco, and to strengthen the analytical framework in the Central Bank

• With the emergence of financial stability mandate for central bank after the 2008 Crisis, the REPI is one of the important indicator to monitor…
Thank you