Monetary Policy and Income Inequality - Insights from the Philippines

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Hitotsubashi University and the IMF Joint Seminar on Inequality: What has been happening, why does it matter, and what needs to be done?

12-13 March 2015 Tokyo, Japan



Structure of presentation

- 1. Recent insights on monetary policy and income inequality
- 2. BSP mandate: upholds public's purchasing power
- 3. Status of income inequality in the Philippines
- 4. Can monetary policy affect income inequality?
- 5. Concluding thought role of monetary and financial policies



1. Recent insights on monetary policy and income inequality

(1/2)

- Mainstream view: Monetary policy's impact on income inequality is still limited
 - No clear evidence on whether monetary policy has dampening or intensifying effect on inequality (Mersch 2014)
 - Another view: Monetary policy drives income inequality
 - Higher inflation rate is positively correlated with greater income inequality (Albanesi 2007; Coeure 2012)
 - Inequality in US rose sharply after GFC (Coibion et al. (2012)
 - Common drivers of income inequality across studies income growth (GDP per capita), unemployment rate, availability of credit, interest rate, inflation, financial deepening



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1. Recent insights on monetary policy and income inequality

(2/2)

- Romer and Romer (1998): "stable inflation and financial stability is good for the poor"
 - Stability objective of central banks pushes monetary policy to shield from poverty and inequality the lowest income classes, especially during recessions (Coeure 2012)
 - Monetary policy can redistribute wealth and create systemic risk (Brunnermeier and Sannikov (2013)
- Recent discussions on channels of monetary policy to income inequality focus on advanced economies (Coibion et al. 2012; Saiki and Frost 2014)
 - Distributional impact of monetary policy via income distribution, financial segmentation, savings redistribution, earnings heterogeneity, portfolio channel (Coibion et al. 2012)
 - Limited for developing and emerging economies (South Korea, Economic and Monetary Community of Central Africa)

2. BSP mandate: upholds public's purchasing power

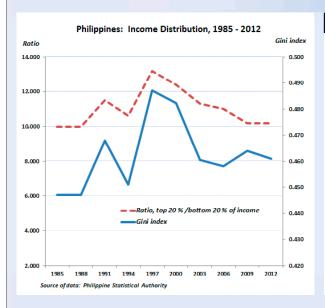
- Maintain <u>price stability</u> conducive to a balanced and sustainable growth of the economy.
- Promote and maintain <u>monetary stability</u> and the convertibility of the peso
- Recently, three pillars of central banking <u>price stability</u>, <u>financial stability</u> and <u>efficient payments system</u>
 - Price stability preserve purchasing power
 - Financial stability maintain confidence in financial system, financial system/products/instruments/ savings/investments
 - o Payments system facilitate trade/transactions

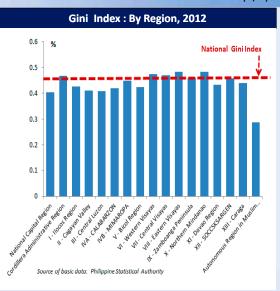


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3. Income inequality in the Philippines: high but declining

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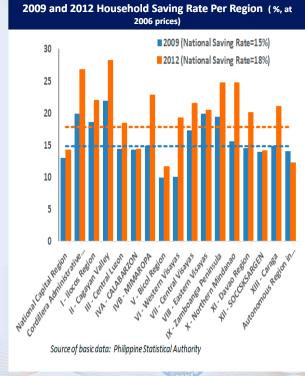




- Income inequality has declined since 1997; 2012 Gini index still higher than pre-1997 Gini index
- By region, inequality appears to be higher than the national Gini index in Visayas and Mindanao regions
- Income distribution appears to be improving; richest 20% of the population received almost 10 times the share received by poorest 20% in 2012; almost the same as pre-1997 crisis figure

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3. Households in Philippines: increasing saving rate, wage growth (2/2)



- Rise in national saving rate (in real terms) from 2009 (15%) to 2012 (18%)
- o Across regions (except ARMM)
- World Bank 2014 Country Report -
- Higher real wage income growth of bottom 20 % than upper 80%
- Higher domestic cash transfers growth (conditional cash transfers) of bottom 20% than top 80%.
- Consumer Finance Survey (2009) –
- Sources of income of households wages, entrepreneurial, foreign and domestic remittances, subsidies
- Spending pattern largely on food and beverage across household income groups; more for bottom 20%
- o Liabilities largely consumer loans

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4. Can monetary policy affect inequality? – Philippine case

(1/8)

- Comprehensive analysis on impact of monetary policy on inequality still limited
 - Focus on monetary policy pass-through (policy rate to market interest rates to inflation and growth)
 - Heterogeneity of household consumption across different income groups difficult to measure
 - Recently, financial inclusion in 37 Asia and Pacific countries tends to affect poverty and income inequality, apart from inflation (ADB 2015).
 - Monetary policy and stability are seen as complementary at aggregate level
 - Actual inflation has been below target while inflation persistence has declined (BSP 2014)
 - Financial stability has become relevant in recent years



4. Can monetary policy affect inequality? - preliminary results

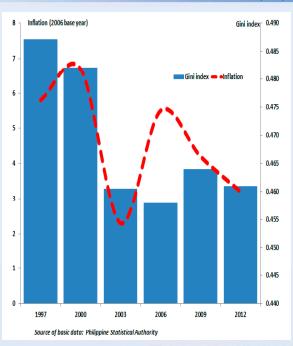
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Variables	Model I		Model II (w/ Financial Inclusion Indicator)	
Variables Affecting Inequality	Coefficient	Probability	Coefficient	Probability
С	33.85	0.00	38.94	0.00
Inflation rate (-1)	0.20	0.03	0.27	0.00
Unemployment rate	0.45	0.00	0.52	0.00
log (OF remittances share to GDP)	2.03	0.02	1.12	0.26
Lending rate (-1)	0.11	0.09	_	_
Number of Banks	_	_	-0.34	0.83
Adjusted R ²	0.69		0.64	
Breusch-Godfrey Serial Correlation LM Test	Stable residual		Stable residual	
Cointegration Test (ADF, Phillips-Perron, Kwiatkowski-Phillips-Schmidt-Shin)	Cointegrated		Cointegrated	
Estimation Period	1992 to 2014		1992 to 2014	
Frequency	Annual		Annual	
Method	OLS		OLS	

4. Preliminary results - inflation drives income inequality

(3/8)

- Empirical issue- literature has long debated relationship between inflation and income inequality
- 1997-2012: Declining actual inflation seems to have driven lower income inequality
- Analysis on inflation rate across income groups can be useful
 - O BSP (2014): Higher inflation rates for poorest bottom 30% of households in Dec 2013- Mar 2014 (average of 5.6%; food and beverage at 74% of CPI basket)





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4. Preliminary results

(4/8)

- Higher unemployment rate drives greater income inequality
 - CSF (2009): More than 60% of households are working, 30% are wage and salary earners and have full-time jobs
 - Recently, decline in unemployment rate growth in employment generation across sectors (industry, services and agriculture)
 - Favorable labor market dynamics rise in wage and salary segment and more college graduates
- Higher remittances lead to higher income inequality
 - Based on various FIES and CSF 2009 remittances are important source of additional income for households
 - Overseas remittances tend to benefit more the higher income groups overseas Filipinos mainly skilled workers/professionals (Rodriguez 1998; Tullao et al. 2007)
 - Beneficiaries of domestic remittances (especially low income groups)
 prefer to spend for daily needs than to invest

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4. Preliminary results

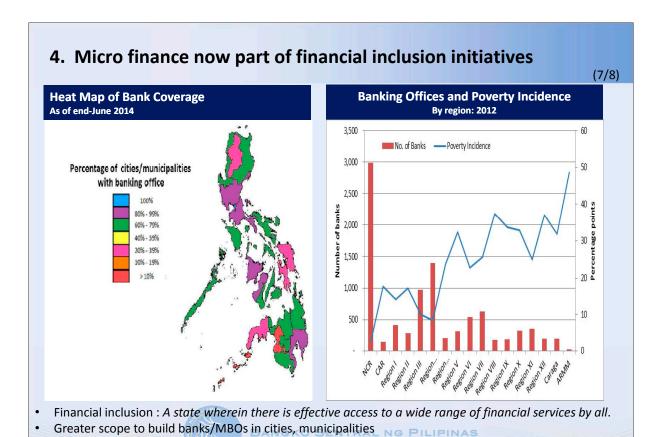
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- Higher lending rate leads to greater income inequality
- Indicates presence of credit constraint (tight loan requirements/collaterals)
- o Presence of 'loan sharks' among poor households
- Model II: Increase in number of banks leads to lower income inequality
- But, not significant better indicator of financial inclusion (banking density); longer and consistent data series
- o Sustained broader access to finance, more banks, more MBOs important



4. Micro finance for poor and low-income households Banks with Microfinance Microfinance Plus 501 MBOs are operating in Microenterprise Loan Microdeposits Operations 322 municipalities 119 61 of these municipalities are financially served only by MBOs 167 banks 18 banks 69 banks 10,620 Housing Microfinance Micro-Agri Loans Microfinance Plus Microfinance Borrowers 9,884 1,155,282 19.9 M individuals 1851-2013 2009-2013 2002 Q2 2014 17 banks 40 banks **Banking Offices** E-Money Agents

- Provision of broad range of financial services (i.e., deposits, loans, payment services, money transfers and insurance products) to poor and low-income households, and their microenterprises
- Micro banking offices (MBOs) target low-income families in areas that are harder to reach
- Regulatory framework BSP, Cooperative Development Authority, Microfinance Council
 of the Philippines



Three-pronged approach: access to financial services, targeted financial education, consumer protection

Financial inclusion appears to have a negative correlation with poverty incidence

4. Advocacy programs support financial inclusion

(8/8)



Credit Surety Fund (CSF)

Credit enhancement scheme to increase credit worthiness of micro, small and medium enterprises (MSMEs) that are experiencing difficulty in obtaining loans from banks

37 CSFs have been established in 27 provinces and 10 cities nationwide (18 December 2014)

Cumulative approved loans for 10,515 beneficiaries reached PhP 1.3 billion (2008 -31 October 2014)

Economic and Financial Learning Program (EFLP)

Milestones



EFLP roadshows conducted since its consolidated implementation in 2010



Participants benefitted from various EFLP component sessions

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5. Concluding thought- role of monetary and financial policies

(1/3)

- Sustained low inflation and inflation expectations is important
- Micro finance and financial inclusion initiatives appear to be promising - some indication of impact on poverty incidence
- New areas of research can be explored



5. Role of monetary and financial policies

(2/3)

- Sustained low inflation and inflation expectations is important
 - Government support crucial (supply-side management for agriculture products)
- Microfinance and financial inclusion initiatives appear to be promising - some indication of impact on poverty incidence
 - Widen reach of BSP's financial learning program (FLP) 6 FLPs in NCR, Visayas and Mindanao in 2015
 - Launch more CSFs in provinces 6 target in 2015
 - Continue groundwork for a National Financial Inclusion Strategy and Consumer Protection Framework
 - Support National Retail Payment System



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5. Role of monetary and financial policies

(3/3)

- New areas of research can be explored
 - o More recent characteristics of Filipino households
 - ☐ FSAM 2010 households by income class
 - □ Consumer Finance Survey 2012
 - Detailed impact of financial inclusion on income inequality and poverty
 - □ Nationwide Baseline Survey on Financial Inclusion (initiatives started in2014)
 - Mapping of financial services access points
 - Impact of financial inclusion on central bank reaction function (trade-off between inflation and output volatility) (Mehrotra and Yetman 2014)



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