This PhD workshop is organized by the Macroeconomics, Growth and History Centre (MaGHiC). The workshop is designed for MaGHiC student members to receive direct feedback from faculty members in a conference setting. There is also a session that provides general guidance for PhD students to become successful macroeconomists. We invite all PhD students with an interest in the research areas of MaGHiC to attend.

Guidance for PhD students in macroeconomics
13:00-13:30 Miguel León-Ledesma

Presentations
Presentations of 20 minutes followed by 5 to 10 minutes of discussion.

13:30-14:00 Jan-Philipp Dueber: “Time-Varying Volatility in Real Business Cycle Models”
Time-varying volatility plays a crucial role in understanding business cycles in emerging market economies. However, the literature treats volatility as an exogenous process. This paper endogenizes time-varying volatility in total factor productivity and the debt premium into a standard small open economy model with cycle and trend shocks to TFP and assesses the quality of the model by comparing it to emerging market data. An additional volatility channel that operates through the debt premium on the interest rate faced by a small open economy can generate countercyclical net exports and excess volatility in consumption as observed in data on emerging market business cycles.

14:00-14:30 Benjamin Caswell: “Optimal Taxation with Public Inputs”
The Chamley-Judd result states that it is optimal to tax capital at zero percent in the long run. This paper demonstrates that if the framework of Chamley (1986) is augmented to include the government as an investor in a productive factor, not just simply a purchaser of output, then this result becomes sensitive to the choice of parameter values. While most calibrated parameter sets in this context tend to generate a zero capital tax in the long run, it can be shown with sensitivity analysis the extent to which the Chamley-Judd result binds for each economy.

14:40-15:10 Anup Mulay: “Durable goods, debt, and monetary policy”
The dynamics of a standard New Keynesian model change when durable goods are added. This is a result of the constancy of the rate of return on long lived durables. But adding debt via a collateral constraint can change this constancy, as well as the dynamics of a model with durables. Are there any insights from this experiment?
15:10-15:40 Yong O Kwon: “The welfare effect of growth indexed bonds”
This chapter examines the welfare effect of growth-indexed bonds within the framework of new Keynesian DSGE model. There already exist papers that show that issuing growth-indexed bond may help stabilize the debt-to-GDP ratio and increase the capacity of countercyclical fiscal policy. However, the analysis on its welfare effect has not been actively studied, especially within the framework of general equilibrium model. It was mostly because, in the standard DSGE models, where Ricardian equivalence holds, consumer choices are immune to the changes in the source of government financing. This paper examines whether and how the use of growth-indexed bonds, instead of typical nominal bonds, affects the level of welfare when Ricardian equivalence does not hold anymore. More specifically, I augmented hand to mouth households[Gali et al. 2007], distortionary income taxes and [Epstein and Zin 1989] type recursive preference to the most widely used medium scale DSGE model of [Smets and Wouters 2007]. The result shows that the growth-indexed bond can significantly increase the welfare of both rational and hand-to-mouth households when the government cannot flexibly change its debt-to-GDP ratio.

How do aggregate economic activities respond to change in different fiscal policy instruments in the presence of large informal sector? In this study we construct a simple RBC model with segmented labor and goods markets to address this question. We analyze the impact of five fiscal policy instruments on the dynamics of key macroeconomics variables in an economy with large informal sector. This study also addresses the implication of productive and non-productive government spending in segmented markets. The importance of different fiscal policy rules in determining the size of multiplier and their role in fiscal consolidation is also analyzed. The analysis shows that the expansion in Government consumption, Investment and decrease in consumption and capital taxes raise the output of both formal and informal sector. Whereas the decrease in labor tax causes the informal sector output to fall. Among the five fiscal policy instruments government consumption and consumption tax have strong impact on both formal and informal sector output. In long run the government investment is more effective in stimulating the output owing to build up in productive enhancing public capital. Dampening effect of labor tax cut on informal sector outweighs the positive impact on formal sector due to which labor tax shock has the smallest effect on total output in comparison to other distortionary taxes. In model with informal economy fiscal policy shocks results in small variation in the magnitude of fiscal multipliers from short to long run as compare to the studies which consider uniform labor and goods markets. In response to all stimulating shocks but the cut in labor tax the output of informal sector remains above steady-state for longer period of time whereas the output of formal sector plunge below steady state after few quarters. In short the presence of informal sector plays an important role in the persistence of the impact of fiscal policy shock on aggregate economic activities.

The abandonment of the Bretton Woods System has led to an increase in the global capital flows among countries in the world. Over the years, there has been a massive flow of capital across the global economy, which became more pronounced in the 1970s. The composition, trend, and dynamics of capital flows have changed overtime. The period 1980-2000 witnessed relative stability in the behavior of capital flows. However, succeeding years (2001 - 2015) have witnessed drastic changes and erratic behavior in capital flows across the global economies. The composition, trend and dynamics of capital flows have changed overtime. The period 1980-2000 witnessed relative stability in the behavior of capital flows. However, succeeding years (2001 - 2015) have witnessed drastic changes and erratic behavior in capital flows across the global economies. The objective of this chapter is to document the changes in the behavior of capital flows in terms of volatility, size, substitutability/complementarity, and persistence. The time period, 1980-2015 is decomposed into two sub-periods (1980-2000 and 2001-2015) for a comparative analysis. Using dataset for a sample of 120 countries that are categorized into income levels, the following results were estimated: (i) the average size of capital flows between 2001-2015 is almost twice that of 1980-2015 for emerging and developing countries; (ii) the volatility of gross flows is higher than that of net flows with advanced countries taking the lead; it is also discovered that volatility in the period 2001-2015 is the higher than that recorded in 1980-2000; (iii) the result of the substitutability or complementarity is mixed, thus pointing to the fact that this behavior of capital flows is unpredictable; (iv) the instruments of capital flows are found to be complimentary for the advanced and emerging countries between 1980-2000, however, the succeeding years shows capital flows instruments are substitute (v) the advanced countries have more stable predictability status, while emerging and developing countries have high level of persistence in the period 1980-2000 and 2001-2015 respectively.