

UNIVERSITY OF PARIS I PANTHÉON-SORBONNE

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Personal Information : Date of birth : December 05, 1985. Citizenship: Vietnam

Doctoral studies

University of Paris I Panthéon – Sorbonne, PhD in Economics, expected completion 2014

Dissertation: “*Essays in General Equilibrium with Borrowing Constraints, Optimal Growth, and FDI*”

References:

Gaël Giraud
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 Professor, University of Evry Val d'Essonne
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Prior education

University of Paris I Panthéon – Sorbonne	MS	Quantitative Finance	2011
University of Strasbourg	MS	Mathematics	2009
Hanoi National University of Education	BA	Mathematics	2007

Fields

Primary fields: Economic Theory, Mathematical Economics
 Secondary fields: Macro - Dynamics, International Economics
 Additional fields: Stochastic Analysis, Multi-objective Optimization

Honors, scholarship

Doctoral Scholarship (Allocation de recherche)	2011-2014
University of Paris I Panthéon-Sorbonne	
Scholarship of Vietnamese Ministry of Education and Training	2008-2009
Third prize, Vietnamese Mathematical Olympiad	2003

Conference presentations

General Equilibrium Days, Univ. of York	Jun. 2014
13 th SAET (Society for the Advancement of Economic Theory)	Jul. 2013
Vietnam Economist Annual Meeting	Jun. 2013
Financial Regulation and Systemic Risk, FEBS/ LabEx-ReFi	Jun. 2013
General Equilibrium Days, Univ. of York	Jun. 2013
XXII European Workshop on General Equilibrium Theory, Univ. of Vienna	Jun. 2013

Seminar presentations

Methods of economic dynamics, Univ. of Paris I & PSE	Mar. 2014
PhD student lunch seminars, Univ. of Paris I	Feb. 2014
Methods of economic dynamics, Univ. of Paris I & PSE	Feb. 2013

Conference participations

Workshop Finance in General Equilibrium, Univ. of Paris 2 & LabEx MME-DII	Jan. 2014
Dynamic Interactions for Economic Theory (DIET), PSE & LabEx MME-DII	Dec. 2013
Summer Workshop in Economic Theory (SWET 2013), Univ. of Paris I & PSE	Jun. 2013
Colloque : Quel modèle de croissance pour l'Europe ?	Sep. 2012
Summer Workshop in Economic Theory (SWET 2012), Univ. of Paris I & PSE	Jun. 2012

<u>Teaching experiences</u>	Pre-master level: Mathematics for economists (6h), Café-séminaire Undergraduate level: Classical analysis (48h), Hanoi University of Industry High school level: Educational internship, Kien Xuong High School	Fall 2013 Spring 2008 Spring 2006 - 2007
<u>Languages, computer skills</u>	Vietnamese (native), French (fluent), English (fluent) Matlab, C, C++	
<u>Others</u>	Co-founder of Café-Séminaire, we organize two seminars per month. https://sites.google.com/site/cafeseminaire/	
<u>Publications</u>	1. "Nonsmooth optimization over the (weakly or properly) Pareto set of a linear-quadratic multi-objective control problem: Explicit optimality conditions" (with Henri Bonnel), Journal of Industrial and Management Optimization , Vol. 7, No. 4, 789-809, 2011.	
<u>Research papers</u>	1. "<u>Collateral monetary equilibrium with liquidity constraints in an infinite horizon economy</u>" (submitted) <i>Abstract:</i> This paper considers an infinite horizon monetary economy with collateralized assets. A Central Bank lends money to households by creating short- and long-term loans. Households can deposit or borrow money on both short- and long-term maturity loans. If households want to sell a financial asset, they are required to hold certain commodities as collateral. They face cash-in-advance constraints when buying commodities and financial assets. I introduce Uniform (resp., Sequential) Gains to Trade Hypothesis under which the existence of collateral monetary equilibrium is ensured and equilibrium prices are uniformly (resp., only for the product topology) bounded. I also provide some properties of monetary equilibrium, including the structure of interest rates and the liquidity trap. This paper was presented in 22nd EWGET, General Equilibrium Days 2013, FEBS/LabEx-ReFi 2013, and 6th VEAM. 2. "<u>Intertemporal equilibrium with production: bubble and efficiency</u>" (submitted), with S. Bosi (University of Evry Val d'Essonne) and C. Le Van (CNRS, PSE) <i>Abstract:</i> We consider a general equilibrium model with heterogeneous agents, borrowing constraints, and exogenous labor supply. First, the existence of intertemporal equilibrium is proved even if the aggregate capitals are not uniformly bounded above and the production functions are not time invariant. Second, (i) we call by physical capital bubble a situation in which the fundamental value of physical capital is greater than its price, (ii) we say that the interest rates are low if the sum of interest rates is finite. We show that physical capital bubble is equivalent to a situation with low interest rates. Last, we prove that with linear technologies, every intertemporal equilibrium is efficient. Moreover, there is a room for both efficiency and bubble. 3. "<u>Intertemporal equilibrium with financial asset and physical capital</u>", with C. Le Van (CNRS, PSE) <i>Abstract:</i> We build an infinite-horizon dynamic deterministic general equilibrium model with imperfect market (because of borrowing constraint) in which heterogeneous agents invest in capital or/and financial asset, and consume. There is also a representative firm who maximizes its profit. Firstly, the existence of intertemporal equilibrium is proved even if aggregate capital is not uniformly bounded and production functions depend on time. Secondly, we study the interaction between the financial market and the productive sector by analyzing "the race between productivity and financial dividend." This paper was presented in PET 2013, SAET 2013, 6th VEAM, Uni. Paris I, General Equilibrium Days 2014. 4. "<u>Financial asset bubble with heterogeneous agents and endogenous borrowing constraints</u>" with C. Le Van (CNRS, PSE) and Y. Vailakis (University of Glasgow) <i>Abstract:</i> We study financial asset bubble in an infinite horizon exchange economy with	

endogenous borrowing constraints. We say that there is a bubble at equilibrium if financial asset's price is greater than its fundamental value. We point out that a bubble appears if and only if the borrowing cost of the economy converges to a strictly positive number. A necessary and sufficient condition of bubble is found: there is a bubble if and only if interest rates are low. We also give conditions of exogenous variables, under which financial asset bubble exists at equilibrium.

5. “Diversification or specification? The roles of FDI spillovers, investment in training, and heterogeneity of firms”, with H.T.T. Nguyen (University of Evry Val d’Essonne)

Abstract: We consider a small open economy with two productive sectors: an old sector produces consumption good by using physical capital and a new sector produces new good by using physical capital and specific labor. There are two types of firms in the new industry: a well planted multinational firm and a potential domestic firm. Our framework highlights some crucial results. First, in a poor country with weak capacity of training and low FDI spillovers, the domestic firm does not exist in the new industry requiring a high fixed cost. Second, once the host economy holds a necessary condition to create the new firm, the competitiveness of the domestic firm is the key factor allowing it to enter the market and even eliminate the multinational firm; interestingly, in some cases where FDI spillovers are strong, the country should invest in the new industry, but not train specific workers. Last, credit constraint and labor/capital shares play important roles in the competition between the multinational firm and the domestic one, especially when return of training or new good price is high or physical capital price is low.

This paper was presented in the seminar “Methods of economic dynamics” (Uni. of Paris I & PSE) and VCREME Workshop.

6. “The Effects of Oil Price Shocks in a New-Keynesian Framework with Capital Accumulation”, with V. Acurio-Vasconez., G. Giraud and F. Mc Isaac (University of Paris I Panthéon-Sorbonne).

Abstract: The economic implications of oil price shocks have been extensively studied since the 1970s'. Despite this huge literature, no dynamic stochastic general equilibrium model was available that captures three well-known stylized facts: 1) the stagflationary impact of an oil price shock, together with 2) two possible reactions of real wages: Either a decrease (as in the US) or an increase (as in Japan); 3) the influence of the energy productivity of capital on the depth and length of the impact of an oil shock. We offer a New-Keynesian model with capital accumulation, which takes the case of an economy where oil is imported from abroad, and where our three stylized facts turn out be accounted for. Our results have important implications for the analysis of the change of the energy productivity of capital since the 80s'. In effect, it is shown to provide a significant explanatory variable of why the oil shock of the 2000s' had such a different impact from those of the 70s'.

This paper was presented in PET 2013, EEFS 2013, and ICOAE 2013.

Research in progress

1. “Optimal growth and FDI”, with H.T.T. Nguyen (University of Evry Val d’Essonne)
2. “Simple general equilibrium models incorporating the assumption that consumption takes time”, with B. Tran-Nam (University of New South Wales, Australia)
3. “A two-dimensional optimal growth model”, with T. Ha-Huy (University of Evry Val d’Essonne)
4. “Credit market, corruption, and economic growth”