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Academic Positions:

Since Oct. 2007, Ph.D. Student in Economics
Thesis Title: Essays on Transportation Congestion in the Central Paris Area
Thesis Supervisor: Pierre Kopp (Professor, CES – UP1, pkopp@univ-paris1.fr)

Since Oct. 2007, Assistant Lecturer in European Political Economy, Macroeconomics and History of Economic Thought (UP1)

Since Sept. 2008 and 2009, respectively Co-delegate of the Ph.D. students for the “*Axe Institution*” and Co-organizer of the “*Séminaire Interne Institution*” (CES)

Since Mar. 2008, Economics Tutor and Dissertation Director for the Columbia University in Paris (Reidhall Institute)

Education:

Sept. 2007, MAGISTER Postgraduate Degree in Economics (UP1)
Sept. 2007, Postgraduate Degree in Public Economics (UP1)

Jun. 2006, Masters Degree in Econometrics (UP1)
Jun. 2005, License Degree in Economics (UP1)
Jun. 2002, High-School Diploma in Biology (Pierre Corneille, Rouen)

Topics of Interests:

Public Economics, Transportation Economics, Regional and Urban Economics, Political Economy

Published Article:

Prud'homme Rémy, Koning Martin and Kopp Pierre. 2008. Paris: un tramway nommé désir. *Revue Transports*, 447, 28-39.

Articles Submitted for Publication:

Facchini François and Koning Martin. 2010. Quelle place pour l'entrepreneur dans les théories de la croissance régionale ?, *Revue Canadienne de Sciences Régionales* (Special Issue: « Dynamiques entrepreneuriales et renouvellement des systèmes productifs »).

Binet Marie-Estelle, Facchini François and Koning Martin. 2010. Les déterminants de la dynamique entrepreneuriale dans les régions françaises, *Revue Canadienne de Sciences Régionales* (Special Issue: « Dynamiques entrepreneuriales et renouvellement des systèmes productifs »).

Working Papers:

Prud'homme Rémy, Koning Martin, Fehr Anne and Lenormand Luc. 2010. Public Transport Congestion Costs: The Case of Paris Subway.

Koning Martin. 2010. Le confort des déplacements dans le métro parisien : essai de valorisation basé sur la méthodologie d'évaluation contingente.

Koning Martin. 2010. The Social Cost of Road Congestion in Ile-de-France Region (and France): Empirical Evidences from the Paris Ring-Road.

Prud'homme Rémy, Koning Martin and Kopp Pierre. 2010. Paris: a Streetcar named Desire.

Presentations in Conferences, Workshops:

Nov. 2010. « *Séminaire Interne Institution* » (CES, Paris). Le confort des déplacements dans le métro parisien : essai de valorisation basé sur la méthodologie d'évaluation contingente.

Oct. 2009. 8th Conference on Applied Infrastructure Research (TU, Berlin). Paris: a Streetcar named Desire.

Sept. 2009. 14th Doctoral Days in Transportation Sciences Eric Tabourin (ENPC, Paris). The Social Cost of Road Congestion in Ile-de-France Region (and France): Empirical Evidences from the Paris Ring-Road.

Aug. 2008. 45th Annual Congress of the French Association of Regional Studies, (UQA Rimouski, Canada). Quelle place pour l'entrepreneur dans les théories de la croissance régionale ?

Apr. 2008, 6th Augustin Cournot Doctoral Days, (University of Strasbourg, France). Paris : un tramway nommé désir.

Researchers who are willing to write a letter of recommendation:

Rémy Prud'homme (Emeritus Professor, l'ŒIL - University Paris 12, prudhomme@univ-paris12.fr)

Claude Ménard (Professor, CES - UP1, claudeménard@univ-paris1.fr)

Motivation Letter:

Dear members of the summer school committee,

In addition to the teachings provided in Sweden, the 23rd ERSA summer school would doubtless offer me precious opportunities to improve current and future academic research. In fact, the topic on which it will focus, "*Productivity and Financing of Regional Infrastructure*", completely circles my doctoral thesis. By giving me the possibility to meet Professors and students sharing these intellectual concerns, the 23rd ERSRA Sumer School appears thus an appreciable step in order to validate a top

quality PhD diploma. This would completely integrate my carrier plan since I intend to work in the academic world of Economic Sciences and Urbanism, in France or elsewhere.

For more than two years now, my research has been aiming at studying transportation congestion in the central area of Paris. Despite its importance, both normative (to understand the trajectory of the urban territories) and positive (to appreciate the everyday life of commuters), the knowledge related to this socio-spatial phenomenon appears quite heterogeneous. Temporal losses induced by the use of private cars (PC) are thus said to range between 0.1% and 2% of the developed countries' GDPs, depending on the methodologies retained. In addition, although hundreds of studies are interested in road congestion, almost nothing has been done by economists on congestion in public transits (PT). By focusing on three regional infrastructures, my thesis therefore constitutes an attempt to take part in the incremental process of knowledge accumulation on transportation congestion.

The Parisian territory, one of the wealthiest worldwide, seems to be a relevant object for studying transportation congestion. It has recently experienced two major evolutions concerning this "*non-market interaction*". While the municipal majority has deliberately chosen road congestion as a mean to reduce the use of PC, i.e. "*regulation by quantities*" with a narrowing of the road-space available for motorists, welfare losses generated by the over-use of the subway network have become critical. The place given to congestion issues within the political debate (regional elections will be held in March) perfectly illustrates these current concerns.

In my thesis, I first measure the evolution, for the period of 2000 to 2007, of the temporal losses induced by the excessive use of the Paris Ring-Road (PRR), a 35 km urban highway surrounding the Parisian municipality. Based on a speed-density methodology which, combined with an extensive database, enables us to differentiate external costs with respect to speed-classes of 5 km/h, this research concludes that the social loss reached 130 M euros in 2007, an amount corresponding to a 14% increase compared to seven years earlier. Congestion costs are then extrapolated and estimated between 0.2% and 0.4% of the French GDP. These ratios become nevertheless three times higher once translated at the regional scale and therefore underline that road congestion represents a major challenge for the Ile-de-France region. This leads us finally to propose "*marginal pricing schemes*" potentially implementable for the PRR. Despite the static framework used, these schemes illustrate well the difficulties related to "*road pricing*" strategies stressed in the literature (variability of tolls, asymmetry between temporal and environmental losses, transfers of commuters' surplus...).

The second article composing my thesis dissertation is settled in the domain of Public Economics. Based on the Cost-Benefit Analysis framework, it appraises a new streetcar line opened in December 2007 in the South of the Paris ("*Tramway des Maréchaux*", T3). This infrastructure has induced important intra-modal transfers. Thanks to a survey conducted on 1,000 users of the T3, we highlight three main results influencing the economic balance. First, the streetcar has induced a weak modal report from the PC toward the PT (2.6%). Second, the temporal losses inflicted to the PC users (and generated by the road-space narrowing necessary to put the T3 on the Maréchaux' boulevards) more than compensate the gains of PT users. Finally, the general decrease in the speed of traffic (both on

the Maréchaux' boulevards and on the PRR) causes that each PC pollutes more. Together, these consequences imply a negative Clear Discount Value (-600 M euros). In a Political Economy perspective however, the project seems positive for the municipal majority. In fact, the Parisian inhabitants represent 60% of the T3 users (and therefore benefit from the temporal and comfort gains) while they support a weak fraction of the purely financial costs (15%).

These two articles are nearly finished and will be submitted for publications in Anglo-Saxon journals soon. The third article I am actually working on would constitute the object of my presentation at the ESRA summer school. As explained below, this paper aims at improving the knowledge related to congestion in PT thanks to an analysis based on the contingent valuation methodology. Once again, this research relies on a major regional infrastructure, namely the first line of the Parisian subway network. It appears thus coherent with the topics tackled by the summer school. Since I intend to complete my PhD dissertation in one year (March 2011) before following post-doctoral studies in a foreign university, I would doubtless benefit from remarks of Professors and students present in Sweden.

To conclude, I hope that this letter has succeeded in stressing the interest I have in participating in the 23rd ERSA summer school. I would consequently be very grateful to the members of the summer school committee for offering me the opportunity to share in this intellectual meeting.

Title of the Intended Presentation:

"Public Transport Congestion Cost: the Case of Paris Subway"

Abstract:

Congestion in PT is much less studied than road congestion. This theoretical asymmetry is regrettable since the "*true-life*" of commuting influences individual well-being as much as the effective length of the displacements. This "*non-market interaction*" must therefore be taken into account within the reflection on modal report policies, especially in the Parisian case where concerns linked to congested travel conditions have recently become critical. For that purpose, our analysis is inspired by the contingent valuation methodology. The survey which constitutes the support of the empirical investigation was conducted on 600 users of the first line of the Parisian subway network during the peak-periods.

Costs generated by uncomfortable travel conditions appear high. What travelers would be ready to pay to avoid congestion in the subway is, on average, about three times the amount of their out-of-pocket payments, i.e. 1.40 euro per trip. The willingness to pay for comfort is significantly influenced by either the objective or the subjective level of comfort in the trains, by the length of the displacements and by some individual characteristics.

Despite the conceptual and statistical difficulties linked to "*revealed preferences*", this article produces a congestion cost curve making the willingness to pay dependent on the current level of density within the trains. This function is useful for incorporating new arguments to Cost-Benefit Analysis when an additional investment succeeds in relieving congestion in another subway line. Conversely, it allows us to calculate that the 8% increase in densities experienced over 2002-2007 implies, at maximum, a 75 M euros welfare loss per year. Finally, it offers new insights concerning "*pricing schemes*" in Parisian transportations. In fact, since the market for travelling with PT is equally characterized by sub-optimality, we propose corresponding tolls and we compare these with those which would be implementable for PC.