Jeanne Commault

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FIELDS OF SPECIALIZATION : Macroeconomics (primary), Applied Microeconomics

EDUCATION

2017 (expected)	Ph.D. Economics, Ecole Polytechnique - CREST
Spring 2016	Young Investigator Research Visit, European University Institute, Florence
Spring 2015	Visiting Graduate Student, University College London
Spring 2014	Visiting Graduate Student, Columbia University (Alliance Program)
2012	M.S. Economics, Paris School of Economics
2012	M.S. Economics and Statistics, ENSAE - National School of Statistics and Economics

HONORS AND AWARDS

2016	Young Economist Award - European Economic Association
2016	Young Investigator Research Prize - International Association for Applied Econometrics
2016	Huebner Doctoral Fellow - S.S. Huebner Foundation
2015-2016	Fellowship from HEC Paris with the Labex ECODEC
2014	Alliance Doctoral Mobility Grant - Alliance Program
2012-2015	Full Ph.D. scholarship - Ecole Polytechnique (Allocation EDX)

JOB MARKET PAPER

- How Does Consumption Respond to a Transitory Income Shock ? Reconciling Natural Experiments and Structural Estimations

Results from natural experiments show that consumption responds strongly and significantly to a transitory variation in income such as a tax rebate or a lottery gain, while structural methods, which rely on theoretical restrictions to identify the consumption elasticity to a transitory shock in survey data, find that it is small and not statistically significant. I account for this discrepancy by showing that structural estimation methods neglect the correlation between log-consumption growth and past income shocks that exists in the baseline life-cycle model because of precautionary behavior, and that is reinforced by borrowing constraints, illiquid wealth, or habit persistence in more general frameworks. This correlation undermines the validity of their identifying restrictions, giving rise to a downward bias. I develop a robust estimator that allows past shocks to affect log-consumption growth. The elasticity to a transitory shock becomes statistically significant and the results imply that, on average, 20% of a transitory gain in net income is consumed within the following year, which is comparable to the findings of the literature based on natural experiments.

WORKING PAPERS

- Precautionary Saving and the Heterogeneity of the Consumption Response to Shocks

  I revisit the conditions under which the response of a consumption to a change in net assets is decreasing in the level of net assets, in a life-cycle model. I extend the results to show that under these same conditions, when income writes as sum of a transitory and a permanent component, the response of consumption to a change in net assets is also decreasing in permanent income, and the response of consumption to a change in permanent income is decreasing in net assets and in permanent income.

- Why Does Habit Persistence Make Consumption So Smooth ?

  Consumption is found to respond less to permanent income shocks than predicted by models based on intertemporal optimization. To rationalize such a response, models require either large degrees of risk-aversion or high levels of habit formation, neither of which are supported by micro-level empirical evidence. I show theoretically that habit formation combines with prudence to reinforce the precautionary motive. Using microdata from the Consumer Expenditure Survey to account for idiosyncratic risk, a decomposition of consumption fluctuations that allows for habit persistence yields substantially larger precautionary smoothing effects.

PRESENTATIONS

2016	Risk Theory Society Annual Seminar, New York ; Internal seminar, HEC Paris ; North-American Meeting of the Econometric Society, Philadelphia ; International Association for Applied Econometrics, Milan ; Society for Economic Dynamics (poster), Toulouse ; Huebner Doctoral Colloquium, Boston ; American Risk and Insurance Association, Boston ; European Economic Association Meeting, Geneva ; Empirics and Methods in Economics, Evanston ; External seminar, University of Miami ; Applied Economics Lunch Seminar, PSE ; 10th Joint French Macro Workshop, Paris (forthcoming) ; 2016 European Winter Meeting of the Econometric Society, Edinburgh (forthcoming)
2015	Internal Seminar, UCL ; European Economic Association Meeting, Mannheim
2014	Zeuthen Workshop, Copenhagen ; Economic Fluctuation Colloquium, Columbia University ; European Economic Association Meeting, Toulouse

RESEARCH EXPERIENCE

2012	Graduate Internship, European Central Bank - Monetary Policy Research Division
2011	Research Assistant, World Organization for Animal Health (OIE), Paris
2010	Research Assistant, Centre Maurice Halbwachs, Paris

TEACHING EXPERIENCE

2012-2015	Teaching Assistant, Ecole Polytechnique
	Macroeconomic Analysis (M1), Graduate, for Pr Edouard Challe
	Introduction to Economics (L3), Undergraduate, for Pr Pierre Cahuc
2011-2012	Teaching Assistant, Université Paris 1 Panthéon-Sorbonne
	Econometrics (L3), Undergraduate, for Pr Catherine Doz
2009-2011	Oral examiner in classe préparatoire B/L, Lycée Lakanal
	Mathematics (2^{nd} year), Undergraduate, for Pr Pascal Mano

REFERENCES

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The Response of Saving and Consumption to a Permanent Income Shock

Research Project - Jeanne Commault

Currently PhD candidate in Economics at Ecole Polytechnique, my research focuses on household's saving and consumption decisions. The present project is concerned with the response of consumption to a permanent income shock.

Motivation The traditional difficulty in assessing empirically the response of consumption to a permanent income shock is that these shocks are not usually observed: in survey data, households report their total income changes and the permanent variations are not disentangled from the transitory ones. As a consequence, authors could simply measure the response of consumption to total income changes (Altonji and Siow (1987), Krueger and Perri (2005), Krueger and Perri (2008)). It is important, however, to make the distinction between the durability of the shocks, because permanent and transitory shocks are associated with different shifts in income profiles and should not trigger the same response from consumption. In a seminal paper, Blundell, Pistaferri and Preston (2008) (hereafter BPP) overcome the problem by adopting a structural estimation approach. They show that, using theoretical restrictions from a standard life-cycle model with a transitory-permanent income process, it is possible to identify separately the consumption elasticity to a permanent shock on net income and the elasticity to a transitory shock on net income with panel survey data. A number of papers have generalized some aspects of this method: Blundell, Low, and Preston (2013), Ghosh (2016), Arellano, Blundell, and Bonhomme (2016) consider different income processes; Heathcote, Storesletten, and Violante (2014), Blundell, Pistaferri, and Saporta-Eksten (2016), Pistaferri, Saporta-Eksten, and Blundell (2016) adapt the estimator to shocks on earnings and wage rates rather than net income and focus on the transmission of these shocks to net income.

This objective of the present project is to extent this method further and make it robust to two phenomenons: history-dependence in log-consumption growth, and the presence of permanent shocks whose effect may amplify or weaken over time. I see three reasons for that. First, empirically and theoretically, it seems that there exists a non-negligible correlation between log-consumption growth and the realizations of past shocks. Theoretically, I show in Commault (2016) that, even in the standard life-cycle model, there exists a dependency between log-consumption growth and past shocks through precautionary behavior: everything else being equal, having experienced a positive transitory shock in the past raises the level of assets with which a household enters the current period, inducing it to make less precautionary saving, thus to transfer less resources to the future and to have a smaller consumption growth. It is assumed away in BPP because of an approximation that the authors make. Other popular extensions of the life-cycle model, including the presence of borrowing constraints,

illiquid reserves of wealth or habit persistence would also generate a negative correlation between log-consumption growth and past transitory shocks. Empirically, Table 1 shows that the correlation between log-consumption growth and past log-income growth is not negligible in the data: while it should be zero according to the BPP approximation, it is almost as large (in absolute value) as the the covariance between log-consumption growth and future log-income growth, which is strictly non-zero in the BPP framework.[⋆] Because such a correlation with past shocks is ignored in the original BPP method, it induces an upward bias in the estimator of the consumption elasticity to a permanent shock. Indeed, I show that the past shocks raise the value of the moment that is used to identify this elasticity, leading to an overestimation of the elasticity when this effect is not taken into account. It is therefore important to develop an estimator that is robust to this bias. In the life-cycle model, there are enough moment restrictions to theoretically identify the elasticity of consumption to a permanent shock and a transitory shock, allowing for a correlation with past shocks. In practice, however, these elasticities are not precisely estimated with survey data. Because, when renouncing to estimate the elasticity to a permanent shock and focusing on the elasticity to a transitory shock the estimates are precise, I suspect that a misspecification of the permanent income process could be the cause of this lack of precision.

Second, there are reasons to believe that the permanent income process of the canonical transitory-income specification is restrictive. In particular, it implicitly impose that permanent shocks always occur at the beginning of the survey year (around March). In reality, households might be promoted in the middle of the year, so that, following a positive permanent shock, income should amplify from the first year to the second: households receive their new, higher, permanent income during only a part of the first year but get it in full during the second and later years. The impact of a permanent shock could also be u-shaped and weakens over time after the second period (e.g. although it remains present in the value of permanent income until the end of a household's life, its value decreases).

Third, Kaplan and Violante (2010) document the existence of a gap between the estimates obtained when applying the BPP estimator to survey data and to simulated data of a life-cycle model calibrated to mimic the characteristics of the income and consumption data used by BPP. This discrepancy is puzzling because it is difficult to think of consumption insurance mechanisms against permanent income shocks that would be present in the data but not captured in the model. Indeed, adjustments in taxes and transfers that could smooth income shocks are taken into account in net income and therefore would be present in both the net income survey data and its simulated counterpart; cash transfers from family and friends are also taken into account in BPP's definition of net income; gifts in kind from family and friends would not be

[⋆]It is driven by transitory shocks at t that both increase log-consumption growth at t and reduce log-income growth at $t+1$ when income goes back to its initial level.

present in consumption expenditures, because they are not expenses, therefore would not be present neither in the consumption survey data nor in the simulated data; strategies consisting of shopping in bulk or going far away to get better prices would translate in a reduction in consumption expenditures that should be present in both the data and the simulated version of these data. It seems that the difference comes not from the value and volatility of income or consumption themselves, which are similar in the data and in the model, but from the specification of the underlying process that generate these values and volatility.

Methods To extend the original BPP estimator, I first intend to derive theoretical restrictions that allow for the two phenomenons that I take into account but that still identify the elasticity to a permanent shock in survey data. I would use the same model as in BPP, but (i) without approximating away the precautionary correlation between log-consumption growth and past shocks, (ii a) in which permanent shocks amplify for one period after they hit, and (ii b) in which permanent income obeys an AR(1), and not necessarily a random walk. Commault (2016) shows that the elasticity to a permanent shock is still theoretically identified when allowing for a correlation with past shocks. I have also worked out an identification strategy in the case permanent shock are allowed to amplify between the first and second period after they hit. Kaplan and Violante (2010) show that the elasticity is still identified with an AR(1) when an external estimate of the persistence coefficient is available.

My plan is then to apply these identifying restrictions to panel survey data and see if they yield precise estimates. I would use the same data as BPP, the Panel Study of Income Dynamics, which contains panel data on income and consumption.

Finally, I intend check whether the gap between the estimates obtained from survey data and those obtained from simulated data persists in this more flexible framework. I would simulate an economy populated by households maximizing their expected utility under a more general permanent-transitory income process in which permanent income either amplifies over the first period or obeys an AR(1). The characteristics of the income and consumption series would be calibrated to match with the PSID data. I would then implement my new estimator to both PSID data and simulated data and compare the results.

References

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Blundell, R., Pistaferri, L., and Preston, I. (2008). "Consumption Inequality and Partial Insurance." *American Economic Review* 98.5, pp. 1887–1921.

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Commault, J. (2016). "How Does Consumption Respond to a Transitory Income Shock? Reconciling Natural Experiments and Structural Estimations." mimeo.

Ghosh, A. (2016). "Income versus Consumption Inequality: The Role of Time-Varying Higher Moments." mimeo.

Heathcote, J., Storesletten, K., and Violante, G. (2014). "Consumption and Labor Supply with Partial Insurance: An Analytical Framework." *American Economic Review* 104.7, pp. 2075–2126.

Kaplan, G. and Violante, G. (2010). "How Much Consumption Insurance beyond Self-Insurance?" *American Economic Journal: Macroeconomics* 2.4, pp. 53–87.

Krueger, D. and Perri, F. (2005). "Understanding Consumption Smoothing: Evidence from the U.S. Consumer Expenditure Data." *Journal of the European Economic Association* 3.2-3, pp. 340–349.

Krueger, D. and Perri, F. (2008). "How does Household Consumption Respond to Income Shocks? Evidence and Theory." mimeo.

Pistaferri, L., Saporta-Eksten, I., and Blundell, R. (2016). "Children, Time Allocation and Consumption Insurance." mimeo.

Appendix

Table 1: Covariances between $\Delta ln(c)$ and past, present and future $\Delta ln(y)$

$cov(\Delta ln(c_t), .)$	$\Delta ln(y_{t-2})$	$\Delta ln(y_{t-1})$	$\Delta ln(y_t)$	$\Delta ln(y_{t+1})$	$\Delta ln(y_{t+2})$
Covariance	-0.0008	$\mathbf{-0.0026}$	0.0167	-0.0032	$\mathbf{-0.0035}$
Obs.	6,320	6,320	6,320	6,320	6,320

Note: This table presents the covariances between the log-consumption growth (nondurable consumption) of a household and its past, present or future log-income growth (net income), in the PSID 1978-1992 sample described in Blundell, Pistaferri, and Preston (2008) and keeping only observations from households followed for at least five consecutive periods.

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Jouy-en-Josas, October, 14th, 2016.

To whom it may concern,

It is with the greatest pleasure that I am writing to support the application of Ms. Jeanne Commault for a job opening in your institution. I have met Jeanne during her fourth year of PhD, during which I was her host professor at HEC Paris.

Jeanne's research is mainly focused on the theory of consumption and in particular, consumption smoothing in response to income shocks. She explores both theoretical and quantitative properties of household consumption. In all her works, she benefits from her excellent training in econometrics, insurance economics and macroeconomics.

In her job market paper, Jeanne revisits results on how income shocks are transmitted to consumption. Her main contribution is to theoretically build an estimator that takes into account the dependence of current consumption on past income shocks, resulting from precautionary saving. She identifies that standard estimators (e.g. Blundell, Pistaferri, Preston, 2008, AER), by neglecting this impact of precautionary saving, underestimate the impact of shocks on consumption. In contrast, when considering this impact, Jeanne shows that her estimator provides results in line with what is obtained in natural experiments, thus bridging the gap between structural estimators and these experiments.

To me, this outstanding paper illustrates many of Jeanne's skills. To start with, she was able to reinvestigate the theory of consumption smoothing to derive a new estimator that she was able to bring to the data to assess its relevance. More importantly, she could do that with the precision that was required to finely analyze the weaknesses of previous approaches so as to find innovative solutions but also with a sufficient degree of clarity so as to make her approach clear and transparent.

Jeanne's striking results are likely to have many consequences. If precautionary saving is at the core of how income shocks are transmitted to consumption, this opens a new set of questions with numerous potential applications. Let me emphasize at least one that results from Jeanne's work. If precautionary saving increases with uncertainty, this means that

uncertainty shocks as introduced by Bloom are likely to affect individual agents' marginal propensity to consume so as to increase the response of consumption to income shocks. This endogeneity of marginal propensities to consume with respect to uncertainty may potentially give rise to an amplification of uncertainty shocks and their connection with aggregate demand and the corresponding literature on aggregate demand externality.

In the end, Jeanne's job market paper is not only important in its own field of literature, qualifying better previous results or adjusting their quantitative relevance, it also allows to understand better consumption and to make numerous connections between consumption theory and numerous parts of the literature.

Let me finally mention that Jeanne has already been accepted in conferences or invited in seminars to present her job market paper. She also won awards thanks to this paper, including the Young Economist Award granted by the European Economic Association.

Jeanne has also additional very innovative works still on consumption and precautionary saving.

The first one is about is about the concavity of the consumption function. Unexpectedly, Jeanne shows that Caroll-Kimball (1996, Econometrica)'s condition is not sufficient to ensure the concavity of the consumption function with respect to net assets and she exhibits a finer condition that is sufficient: on top of Caroll-Kimball's condition, agents' preferences should feature Decreasing Absolute Risk Aversion. To me, this contribution makes a lot of sense and illuminates the connection between household behavior in face of risk and the well-known Keynesian intuition of the decreasing marginal propensity to consume. From this perspective, I see this paper as the theoretical counterpart of Jeanne's job market paper. Decreasing Absolute Risk Aversion ensures that precautionary saving is decreasing with respect to wealth and this is why the consumption function is concave (or the marginal propensity to consume is decreasing). In other words, precautionary saving (and what is behind precautionary saving: wealth, uncertainty …) plays in central role in marginal propensity to consume and in aggregate demand.

The second one goes further into the investigation of the role of precaution saving, there in explaining the "excess smoothness" of consumption. Jeanne argues that considering precautionary saving properly allows to reduce the level of habits that is required to match the smoothness of consumption. This third paper already shows how Jeanne is able to build on her previous works to investigate further potentially-connected issues and to find new path-breaking insights.

More generally, I am convinced that Jeanne is going to have many innovative contributions in economics over the next years. I would not be surprised if many of her current papers are published in very top journals. An important aspect about Jeanne is also her impressive self-

directedness and autonomy in creating her own research agenda. Associated with her perseverance and her maturity to formulate important research questions, this has greatly contributed to her current projects. This also convinces me that she will be able to go further in her future projects, possibly broadening her interests or finding an alternative innovative approach that no one has ever noticed before. I am really looking forward to read her future papers!

Before concluding, let me add a few words about Jeanne. As I said, I have the pleasure to host Jeanne at HEC Paris during the academic year 2015-2016. I had the opportunity to see how an outstanding economist Jeanne is. She is also great to talk to, she is mindful of everyone, has a great sense of humor and I have no doubts that she will make a great and well-appreciated colleague. She is also a very good presenter, who successfully conveys complex and technical messages even to a less-specialized audience.

In summary, Jeanne has an outstanding combination of skills, she is also very thoughtful and a wonderful colleague. I enthusiastically recommend her and support her application without reservations.

Please do not hesitate to contact me if you have any questions.

Sincerely,



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Edouard Challe
Department of Economics

October 10, 2016

Recommendation letter for Jeanne Commault

Dear Sir/Madam:

This letter is to recommend Jeanne Commault, who has been conducting a Ph.D under my supervision at Ecole Polytechnique and CREST, and is now applying for a position at your institution.

Jeanne Commault is the best Ph.D student I have had the chance to supervise so far (out of seven), and the best student from the Ecole Polytechnique Econ PhD programme over the past five year (while our programme is young, we have built it with the same standards in mind as the best European programs). She is also one of the best students over the past few years within the larger crowd of PhD students at CREST, our joint research center with ENSAE; within this larger crowd she is comparable to Sophie Osotimehin, now an Assistant Professor at the University of Virginia, and Thomas Le Barbanchon, now an Assistant Professor at Bocconi University in Milan. In the course of the PhD Jeanne also spent a year at HEC Paris (through a partnership we have with them) and she visited Columbia University, UCL, and the EUI in Florence (for three months each time).

Jeanne is working on formulating and testing alternative consumption theories, notably investigating the role of prudence, habit formation and liquidity constraints. She currently has three papers: her job market paper on the consumption response to transitory income shock, a paper on the concavity of the consumption function, and a paper on the smoothness of consumption under habit formation.

Her job market paper ("How do consumers respond to transitory income shocks?") revisits an old question with wide-ranging implications. The paper starts with the observation that, despite its importance in many areas of macro, the consumption response to transitory income shocks, i.e., the "marginal propensity to consume" out of such shocks, is far from being consensual empirically. In particular, different empirical approaches yield different estimates of the consumption responses, ranging from a large effect (as quasi-natural experiments on tax rebates indicate) to a

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nonsignificant effect (as structural estimations of standard life-cycle models suggest). Starting from there, the paper makes two main contributions.

First, the paper shows that the identification assumption that past income shocks do not affect the consumption response to current shocks, a common assumption within the literature that estimates the elasticity of consumption using structural models (i.e., Euler equations), is not consistent with most models of consumption behaviour, including the simplest frictionless life-cycle model (as soon as preferences are not quadratic, i.e., as certainty equivalence does not hold). To understand intuitively why this is the case, assume that the consumer is "prudent", so that it forms positive precautionary savings in the face of expected consumption volatility. If such a consumer has been lucky in the past and experienced a series of favourable income shocks, then he/she has been able to accumulate more precautionary wealth, and the latter will affect the consumption response to current shocks: his/her consumption response to a positive transitory shock will be stronger than if he/she had not experienced such favourable shocks and remained wealth-poor (because the savings response will be weaker). This effect operates in addition to the pure permanent-income effect under certainty equivalence (in which initial wealth does not matter for the consumption response to the shock; only the induced change in permanent income does). Taken literally, this result invalidates existing estimates of the elasticity of consumption to transitory income, since those estimates critically rely on the assumption that past shocks do not affect the consumption response to current shocks. Hence, except in the knife-edge case where households have quadratic preferences, estimates based in this identification assumption are inevitably biased. The paper additionally shows that other frictions, such as liquidity constraints, also lead to the invalidation of the same usual identification assumption, and therefore generate a similar bias; but it is important to keep in mind that the bias is present even in the simplest, frictionless life-cycle model.

How important is this bias in practice, and can it explain the diverging conclusion one obtains between natural experiments and structural models of the consumption response? Answering this question requires the construction of an alternative, unbiased, estimator, and its application on historical data. This is the second main contribution of Jeanne's job market paper. Her estimator allows for past shocks to affect current consumption and is thus immune from the previous bias. By comparing estimates obtained with a standard (biased) estimator and with the proposed (unbiased) estimator, she is thus in a position to evaluate the size of the (downward) bias. The estimator is used to estimate the response of US consumers to transitory shocks using PSID data with imputed consumption from the CEX (following Blundell, Pistaferri and Preston, AER 2008). The new estimator turns out to yield a consumption response to transitory income shocks that is

not only statistically significant but also economically large (where the biased estimator yields a small and insignificant elasticity). Moreover, the unbiased elasticity is quantitatively consistent with estimates of the marginal propensity to consume out of a windfall income shock obtained from natural experiments: the elasticities estimated in the paper imply that about 20% of a transitory income shocks is transmitted to consumption. In this sense, the paper reconciles the so far contradicting evidence on the impact of transitory shocks on consumption. This is an important result not only in its own right, but also more generally for macroeconomics, especially as regards fiscal policy. Incidentally, the paper perfectly illustrates the nice blend of techniques that Jeanne is able to mobilise towards a well identified research question, from the theoretical analysis of the consumption function, to the construction of the appropriate estimator, to its implementation using state-of-the-art empirical methods and datasets. The paper has gained quite a bit of visibility in the recent months (notably though two prizes: the EEA Young Economist Prize and the Young Investigator Research Prize), and I believe that it will be recognised as a significant contribution to the literature on individual consumption behaviour and will be well published.

The second project that Jeanne Commault has been working on ("Precautionary Saving and the Heterogeneity of the Consumption Response to Shocks") is a theoretical analysis of the concavity of the consumption function when consumers have a precautionary motive. The main paper in the literature is Carroll and Kimball (Econometrica, 1996), who claim to show that, when income is uncertain, HARA (Hyperbolic Absolute Risk Aversion) preferences are sufficient to ensure the concavity of the consumption function, so that the marginal propensity to consume out of wealth is decreasing in wealth. Jeanne shows that the HARA restriction is not in fact a sufficient condition for concavity in general: sufficiency follows from the HARA assumption as well as the additional restriction that preferences be DARA (Decreasing Absolute Risk Aversion). Moreover, the way the analysis is undertaken allows one to inspect the mechanism underlying the concavity of the consumption function under this new set of sufficient conditions. The key factor lies in the shape of the policy response for assets, as driven by the strength of the precautionary motive and how the latter varies with wealth. In particular, the paper shows that precautionary savings are convex in asset wealth, hence consumption has to be concave in asset wealth. The same holds true for the precautionary savings and consumption responses to changes in permanent income. The paper thus contributes to a better understanding of the properties of the consumption function within the standard life-cycle model, and makes clear what assumptions are effectively required to generate properties of the consumption function that are empirically plausible.

Jeanne's third paper ("Why Does Habit Persistence Make Consumption So Smooth?") seeks to reconcile the small degree of habit persistence that comes out of Euler equations estimated on

consumption panel and the important smoothness of consumption one observes on aggregate data. The key insight of the paper is that consumption habits work to strengthen the precautionary motive generated by "prudent" preferences (in the sense of convex marginal utility). Hence, they make the response of precautionary savings to permanent income shocks stronger – or equivalently the consumption response weaker. If one thinks of individual households as having a strong precautionary motive in the first place (e.g., because uninsured idiosyncratic risk is pervasive), then one in fact needs little consumption habits to reproduce the observed smoothness of consumption in response to shocks to permanent income.

Let me conclude by saying that, in addition to her ability to undertake interesting and challenging research projects, Jeanne is a great person to interact with. She is enthusiastic about her and others' research, and she actively participates in the many seminars that she attends. She has been my TA in macroeconomics for three years and has done a great job. She may occasionally appear as somewhat shy, but this is just humility, due to the fact she is the exact opposite of an arrogant person. She is also independent: my supervision during those years was essentially about giving feedback, but she elaborated completely on her own all three research projects described above. This, in my view, demonstrates her ability to diagnose, and then handle, important economic problems.

To summarize, Jeanne Commault is an extremely promising young economists who has already made contributions in her area of expertise and will make many more in the future. She will also be a very friendly colleague to work with. I enthusiastically recommend her to any department, except perhaps for the top five.

Please do not hesitate to contact me should you need any further information.

Regards,

Edouard Challe (Ecole Polytechnique & CREST)

