

April 14, 2009

**Opponent's report on the doctoral dissertation of Branislav Saxa entitled
ESSAYS ON EXPORTING BEHAVIOR OF FIRMS AND ON INFLATION
PERSISTENCE**

The dissertation consists of three essays of which two deal with different aspects of exporting behavior and the third (co-authored by Michal Franta and Katerina Smidkova) involves an investigation of inflation persistence in the new EU member states. All three essays are essentially empirical.

The focus of the first essay is a test of the learning-by-exporting hypothesis. The basis for the test is a firm level panel data source from the Czech Republic. The problem is that of distinguishing the learning-by-exporting experience from the changes in company management that may lead to initiating exports as well as increasing the firm's productivity. The author's way of dealing with this problem is two-pronged, one prong being matching by propensity to score (i.e., matching two otherwise similar firms of which one is exporting and the other one is not) and the other prong being regression analysis controlling for potential management changes.

The subject of the second essay are the differences in exporting behavior between domestic and foreign owned firms. This involves sunk costs, responsiveness to exchange rates, and spillovers. The basis for the investigation is again a firm level panel data

source from the Czech Republic, supplemented by the exchange rate data from the Czech National Bank.

The topic of the third essay diverges from exporting behavior of the Czech firms to an investigation of inflation persistence in the new EU member states. The idea here is to compare inflation persistence in the new member states with that of the Euro area member states. The analysis involves several approaches to measuring inflation persistence including measures that are purely statistical as well as employing structural dynamic analysis.

The work in this dissertation is, generally speaking, of a high professional quality. The technical expertise of the author is on par with common research practices, and the methodology used is at times quite ingenious. All three essays represent original contributions to our knowledge, at least on the empirical level. However, the dissertation is not without certain shortcomings that might deserve the attention of the author. These are listed below.

Essay 1

General remark: The whole discussion of the productivity issue would be much clearer—and simpler—if the author recognized the distinction between changes in productivity due to changes in the production function (technological change) and

those due to changes in the utilization of inputs (managerial change). The former changes are typically examined via frontier production functions while the latter could be examined by checking the marginal productivity conditions. To do this may be beyond the scope of the essay but at least some attention to this should be shown.

Page 10, line 2 of Section 3: The word “estimation” in econometrics always refers to parameters and not to variables (such as productivity). See page 11 and elsewhere in the text.

Page 11, lines 13-17: On the point of correlation between the production function disturbance and the inputs see Zellner, A., Kmenta, J., and Dreze, J. (1966) “Formulation and Estimation of Production Function Models”, *Econometrica*, Vol. 34, 784-795.

Page 12, lines 9-10: “...a large set of covariates might lead to high variance of estimated effects...” This is a long-winded description of multicollinearity!

Page 12, last four lines: This involves simple testing for relevance of additional explanatory variables.

Page 13, line 7 from the bottom: This is a terribly casual way of introducing the use of the instrumental variables method of estimation. What is the source of the IVs ?

According to all econometric texts the source of IVs are the exogenous (predetermined) variables appearing in the remaining equations of the structural system which consists of

As many equations as the number of endogenous variables in the equation of interest. Admittedly, the common practice in the literature is typically sloppy on this point but CERGE students should know better. The author should consult Angus S. Deaton. (2009): "Instruments of Development" , NBER Working Paper 14690 on this point and at least give some excuse for the sloppiness in selecting the IVs.

Page 14, line 4: How is export intensity defined and measured?

Page 14, line 14: This is the first time that the existence of six different measures is mentioned although it is already relevant in the preceding section.

Page 15, line 4 from the bottom: "...section six" should read "... section seven".

Essay 2

Page 42, lines 9 and 11: How is the serial correlation represented in the two-part equation for the disturbance?

Page 42, line 5 from the bottom: "...the right side of (7)..." should read "...the right side of (5)..."

Page 47, line 3: Reference to the Arellano-Bond article should be given.

Page 47, lines 2-4 from the bottom: Since “it may take some time for a firm to react...variables are included either with no lag or with lag of one year.” Here “either/or” makes no sense, the word “and” would.

Page 48, line 8: The word correlation refers to a relation between two variables without controlling for any other variables. Is that what the author means here?

Page 49, lines 5-9 from the bottom: Bad English—and too long a sentence!

Page 49, line 3 from the bottom: If lagged concentration measures are relevant and are omitted, the estimated coefficients are biased.

Page 49, lines 1-2 from the bottom: “...two coefficients...becomes...”?

Essay 3

Page 61, lines 7-8: “...various studies in 2002...”? The studies on page 65 refer to years past 2002!

Page 64, lines 8-9 from the bottom: “...differences in inflation persistence...are blamed for ...inflation differentials...” This makes no sense (unless “differences” and “differentials” are two different terms, in which case an explanation is in order).

Page 65, last line: Please explain “HP filter”.

Page 67, line 4: Inflation persistence is measured, not estimated!

Page 71, line 7: Setting beta sub one equal to zero removes the only economic (and interesting) variable from the equation. This should be given a good excuse.

Page 75, line 8: The use of a 2SLS estimator implies an existence of another structural equation with known exogenous (predetermined) variables. This should be included in the discussion.

Page 83, lines 5-6 from the bottom: “One has to bear in mind that we do not know the exact parameter values and must work with estimates.” What is the point of this sentence? Everybody knows that parameter values are never known!

Page 86, line 8 from the bottom: Please give reference to the “Geweke and Porter Hudak’s technique.

Page 89, lines 5-6: “Table 6 below reports the estimation results...for various sets of instruments.” This is a real fishing expedition. Why not use a linear combination of all of them (as in 2SLS) ?

Page 91, line 8: The gammas should have “hats” over them.

The dissertation represents a serious and scholarly piece of work and , after taking care of the above listed shortcomings, would in my opinion well deserve giving Branislav Saxa the doctorate degree.

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