



Záznam o průběhu obhajoby disertační práce

Akademický rok: 2020/2021

Jméno a příjmení studenta: Mgr. Petra Valíčková
Rok narození: 1987
Identifikační číslo studenta: 43598803

Typ studijního programu: doktorský
Studijní program: Ekonomie a finance
Studijní obor: Ekonomie a finance
Identifikační čísla studia: 396099

Název práce: Three essays in Development Economics
Pracoviště práce: Institut ekonomických studií (23-IES)
Jazyk práce: angličtina
Jazyk obhajoby: čeština
Školitel: doc. Ing. Tomáš Cahlík, CSc.
Datum obhajoby: 21.04.2021 **Místo obhajoby:** Praha
Hlasování komise: prospěl/a: 6 neprospěl/a: 0

Průběh obhajoby: The Defense Committee Chair welcomed committee members and all participants that joined the defense online in Microsoft Teams. The Defense Committee Chair initiated the defense by verbal statements confirming (i) that a satisfactory number of Defense Committee Members were present, (ii) that the student fulfilled all the requirements as listed in the Study and Examination Code of Charles University.

The Defense Committee Chair introduced all committee members and asked Petra Valickova to present her dissertation thesis. Petra Valickova shortly described the main findings of the dissertation. Afterward, Petra Valickova focused on the third chapter called „The Costs of Providing Access to Electricity in Selected Countries in Sub-Saharan Africa“ in more detail. After the referees and the advisor summarized their reports, an open discussion followed. During the discussion, Petra Valickova satisfactorily answered all the questions from the audience. At the end, Petra Valickova left the room, all audiences except the committee left the online room, and then the committee voted.

Question 1: Regarding the meta-analysis (MA), could you please shortly comment on why some studies defined the dependent variable in nominal terms?

Answer: The research objective of the MA was to objectively summarise the research findings and to explain why studies derive different results when estimating the relationship between financial development and economic growth. The vast majority of studies relied on real GDP growth rates, a few specified the dependent variable as nominal GDP growth. The primary studies relied on

different estimation techniques, used a different combination of dependent and explanatory variables and controlled for different other variables that can have an impact on the growth process. From the top of my memory, I recall a couple of studies that relied on GDP growth in nominal terms that also included a change in the price level among the explanatory variables alongside a proxy for financial development. Other studies that used GDP growth rate in nominal terms relied on the autoregressive distributed lag model and combined cointegration. I am not familiar with this econometric technique but it's possible that the issue of the change in price levels is somehow controlled for. In the MRA I include a flag if a different specification than my base category (which is the real GDP growth rate in per capita terms) is used. Therefore, I am looking at whether a different specification (in this case specifying the dependent variable in nominal terms) leads to different results. That being said, I think it is a really good point and it is definitely what the researchers have to consider when designing the econometric approach used in the analysis.

The Committee was satisfied with the answer.

Question 2: Before thinking of financing new interconnection between countries, what recommendations could be made to increase the efficient use of interconnectors between countries?

Answer: We see that the highest benefits from trade could be derived from the efficient use of existing interconnector transfer capacity. However, to capture the benefits of trade, countries have to overcome perceived or real security of supply issues and focus on developing so-called "soft infrastructure", this includes setting transmission charges to encourage efficient trade, building trust in neighboring countries, or integrating regional resources in planning. Today we see that countries have a clear preference for self-sufficiency in the generation, we also see that often countries do not pay for imports on time and significant arrears accumulate over time, which undermines trust between countries and reduce the willingness of a country to engage in trade. For example in Zimbabwe where I talked about the drought that took place in 2019, the country had limited ability to resort to imports from South Africa due to the accumulated arrears. In order to overcome these barriers, one could for example put in place a payment mechanism where imports are paid for preferentially (this was the case recently in West Africa).

The Committee was satisfied with the answer.

Question 3: Could you please shortly comment on the use of endogenous decision variables like in the case of interconnections?

Answer: Previous research included flows over the interconnectors as exogenous input into the optimization model, which I see as an important shortcoming. We optimize both decisions about the amount of electricity flow on each interconnector between two countries which is optimized for each hour, and also decisions about new transfer capacity that could be developed in the region (i.e. those are both decided endogenously within our modelling framework). We also limit the decisions about new interconnector projects that could be developed to those pre-identified for development in the region.

The Committee was satisfied with the answer.

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| Výsledek obhajoby: | prospěl/a (P) | |
| Předseda komise: | prof. Ing. Evžen Kočenda, M.A., Ph.D., DSc. (přítomen) | |
| Členové komise: | doc. PhDr. Michal Bauer, Ph.D. (přítomen) | |
| | prof. Ing. Karel Janda, Dr., Ph.D., M.A. (přítomen) | |
| | Ing. Vilém Semerák, M.A., Ph.D. (přítomen) | |
| | Mgr. Milan Ščasný, Ph.D. (přítomen) | |
| | Claire Nicolas, Ph.D. (přítomen) | |