

What is Independent Business Research?

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2.1 What is Thesis Topic?

After reading the first chapter, you feel extremely energetic to complete Independent Business Research, in order to make your friends, family and thesis advisor proud so that you have time to spend on something else. Usually, there are no topic restrictions on "Independent Business Research", unlike Science research, where you were given topics based on the lab you are working at. *How will you start?*

THE FIRST APPROACH. Let's Google/Bing "Business Master Thesis Topic" and find the one looking interesting for you. You would find that there are several websites giving you tons of topics, such as [Dissertation-Help, 2024]. I will list five examples covering different fields of business management.

- ▶ Does technological innovation lead to convergence of business operations?
- ▶ What is the effect of influencer marketing on brand dominance?
- ▶ What factors lead to product life-cycle management implementation success in certain industries?
- ▶ What are positive/negative impacts of artificial intelligence (AI) on project management?
- ▶ How do managers achieve competitive advantage strategies in certain industries?

These "research" questions seemingly look quite impressive and seem practical for employment. However, these are not valid thesis topics yet, which can be readily used as the starting point in conducting Master Thesis. **These questions are too vague, or even problematic in academic research.** The first topic is problematic as convergence of business operations has not been observed yet, and this is contradictory to fundamental principles of Organizational Behavior that suitable management styles differ depending on each organization. The second topic cannot be verified even using experimental methods because brand dominance is hard to measure, as product substitutability widely differs across consumers. This would contradict principle of marketing that each customer is different, so market needs different brands to suit different needs. The third question is not testable as it involves listing all firm products at each period of time, and firm assessment of the product stage, which is internal to the firm. Further, success at product level is ambiguous, even using internal firm data due to shared overhead. This is different from firm life cycle in [Zhang and Xu, 2021] where there are existing measures.

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Exercise 2.1

As I mentioned in Day 1, I require active reading from you to ensure solid understanding of the material.

Q: Why aren't thesis topic 4 and 5 valid Master thesis topics, ready to be used for your independent business research?

Finish this question before you proceed.

Now you understand why the first approach, commonly first attempt for students, does not work for Master Thesis. Let's discuss the second approach, heavily suggested by several professors that I had personal discussions with. *Is this the way to go?*

THE SECOND APPROACH. Let's read several journal articles from top-tier journals, and see which one we (student and supervisor) can work on. To conceal the professor(s)' identity, let me use American Economic Review (AER) to illustrate the essence of this approach. Specifically, let me introduce three articles from AER Vol. 113 (Oct 2023).

- ▶ Economic Origins of Government
- ▶ Regulation Design in Insurance Markets
- ▶ Intrinsic Information Preferences and Skewness

We are improving the frontier research! *Does not this look impressive either? Are not these topics valid research questions, eligible for top-tier journals?* To do anything directly with these research papers, let's look at the requirement of each paper. For the first paper (with three professors), it uses archeological panel dataset on river shifts to compare the outcomes among two sides of river shifts. For the second paper (with three professors), it constructs a perfect economic environment which is mathematically tractable yet shows contribution for existing research. For the third paper (with three professors), it uses a lab experiment to establish this finding and replicates its own study using a field experiment. *What do you think?*

There are two main problems using this approach: resource infeasibility and conceptual misunderstanding. Regarding resource infeasibility, the work requires the collaboration of three professors with feedbacks from conference and journal referees. Most often, they are supported by research grants and labor-intensive data curation (sometimes by a group of research assistants). Further, these works span from five to ten years from the plan to publication. That means doing similar studies is not an option for Master students, even for PhD students (except they are parts of this research process). Regarding conceptual misunderstanding, the common mistake among students (even some professors) is that research is about finding a small hole (contribution) within the published work. As these research studies have been scrutinized heavily by several experts, it is unlikely that authors forgot to do relevant things. Worse, the stuff authors did not show may be considered by them, but they found that it is infeasible. [Varian, 2016]

2.2 What is Good Thesis Topic?

You are aware that the first approach (blind Internet search) and the second approach (blind journal search) do not lead to Master Thesis completion. The natural follow-up question is *what is the correct approach*.

Let me frame the question in an easier way: what are commonalities of these two approaches we want to avoid. We want to avoid infeasible thesis topics. The first approach leads to problematic thesis topics while the second approach leads to impossible thesis topics. In other words, **a good thesis topic is a feasible thesis topic**.

There are two main styles of doing academic research in business (Economics, Finance, Management). The first is an empirical paper, very common especially for Finance and Management, where the objective is to establish or rule out causality from endogenous variable X to an endogenous variable Y based on existing models (*Why do I say "endogenous X "?* We will see in Day 4). The second is a theoretical paper, quite common in some Economics subfields, where the objective is to construct an equilibrium model based on existing frameworks in order to explain some counterfactuals. From my personal experiences, it is quite rare in the second approach in management study. Despite the differences in the description, *did you see similarities between these two styles?*

The similarity is that these two styles must be feasible research topics anyways. Although this seems obvious, I have seen some professors ignore this obvious requirement while discussing research directions. Such ignorance can fall into two broad categories. First, research topic does not fit student training, rendering such topic infeasible. **Instead of solely focusing on finding a small hole in a single academic paper, you have to understand the research field that this paper belongs to.** Closely reading a single or a few papers to find research topic is not practical. Instead, understanding the boundary of research area (with other applicable fields) leads to a solid thesis topic. This practice leads to the understanding of interesting questions with managerial implications, commonly used methods and research directions.

This seems impressive, but we cannot read every single paper in the field. My practical recommendation is to check your program specializations and which fields research-focused courses belong to, such as Asset Pricing and Macro Finance. However, as mentioned in Day 1, most courses tend to be practical, leaving a large gap between teaching and research. **You have to check syllabus (and reading list) or contact with instructors for more details.** For example, if the course mainly uses textbooks and case studies, it is very likely that you will not get the research topic anyways. Still, decisions to enroll that course also depend on your program requirements and personal goals, aside from research goals.

Rather than trying to build extensions from existing papers, you have to understand the bigger picture. For example, although "Economic Origins of Government" uses archeological dataset which you cannot do by yourself, the bottom line is that government role is mainly to provide public goods. This theoretical motivation would be useful if you

would like to study Macroeconomics models with public finance with calibration. In the second paper, "Regulation Design in Insurance Markets", even though you would not like to extend their already complicated models, otherwise they easily become intractable. The bottom line is the constraint of regulatory performance by limited menu offerings. You can investigate this kind of questions with other mechanism designs whether the contribution is unique to their models. **The expected outcome of research-focused course is that you have a sense of research agendas among scholar fellows through more rigorous training than "practical" courses.**

Exercise 2.2

Seeing the bigger picture will prevent you into the pitfall of finding small hole for crafting research topics.

Q: By checking the abstract (and introduction) of "Intrinsic Information Preferences and Skewness" (AER Oct 2023), what is the implication of this paper on future research?

Finish this question before you proceed.

The second mistake is that thesis topic ignores the data requirements. Labor-intensive data collection alone, as valued in top journals such as AER or valued by some professors, is not valued in Master Thesis. You would like to collect data for thesis, regardless of empirical or theoretical research, with minimum effort to focus on higher level issues. **Hence, a decent understanding of database provided by the university is essential**, and practical recommendation on this will be provided in Day 3. The database understanding is also necessary for experimental design since you have to understand the process of converting experimental raw data into applicable measurements.

The closely related concept to thesis topic is **thesis title**. Generally, thesis title is more specific than thesis topic. The natural question is *what is good thesis title*. Let me cite an article written by Terrence Tao. In short, the thesis title should be a **valid research question + specific methodology**. You need a valid research question to show that the research question is interesting. **It has to be non-obvious and has managerial implications**. In other words, the research has to provide the answer that the readers would not know before reading, and the answer is meaningful in terms of Economics, Finance or Business Management. **The specific methodology tells reader the logic or roadmap that this paper would proceed**. However, by omitting specific methodology, it leaves a bad impression to academic readers, most likely because they suspect your result correctness if you attempt to show that you are solving an interesting question (most likely big question still in progress). Especially without track records in publications and secure career, researchers are advised to get relatively lower hanging fruits and skeptical of their own results. This reasoning explains why the second approach, even highly recommended by some professors, is not feasible.

Exercise 2.3

Thesis title is the only statement that academic readers take for granted without making judgements.

Q: Evaluate 5 topics from the first approach and 3 topics from the second approach against the following criteria:

- 1) Interesting: the answer to this question is non-obvious without reading the article
- 2) Logic: the title reveals specific methodology used, instead of just outlining the big question
- 3) Managerial Implication: assuming that the result holds, what can business professionals learn from the result?

Finish this question before you proceed.

2.3 (PRO-TIP) How to Read the First Paper

As I mentioned in Day 1 that there is a huge gap between teaching and researching, making Master thesis completion unnecessarily difficult. **PRO-TIP includes the practical suggestions that are related to the current topic.** We have discussed extensively regarding thesis topics and titles. The natural question is *how to read the paper*. As you will see, papers are not textbooks or novels that you can read from the first word to the last word. Instead, research paper requires different pace of reading.

I summarize the practical suggestions from two videos: prof Andrew Ng lecture at Stanford University and Machine Learning engineer Yannic Kilcher guide on how to read paper. However, I will adapt their approaches to AER paper "The Economic Origins of Government." Notice that **the purpose of reading first paper is to know enough in order to proceed and understand the field**, preventing being trapped into finding a small hole in the papers.

STEP 1: Read title and abstract, and visualize.

Ex: There are two existing theories: cooperative and extractive theories, and the paper would like to support the first one. Suppose district A has river shifted into (no government) while district B has river shifted outward (government). Using DiD logic, district B has higher increase in public goods compared to district A.

STEP 2: Look closely at key figures.

Ex: Both Figure 3 and 5 show that the river shift is valid to study government formation (map and chart). Figure 6 shows large difference between state formation among two groups, together with public goods provision (canals, tribute).

STEP 3: Read the introduction.

Ex: Three predictions. 1. river shift away creates state formation; 2. river shift away creates large canal (public goods); 3. river shift away leads to larger tribute by beneficiaries (taxes)

STEP 4: Note key economic settings (theory paper) or regression equation (empirical paper)

Ex: The outcome variable is regressed on cell indicator, time indicator, interaction term (basic ingredients of DiD) with other controls: rainfall, temperature and urban status. The coefficients of previous periods are insignificant (validity) while the coefficient of current period is significant, using OLS where SE is adjusted.

Have you noticed something? By multiple but short passes through the paper, we repeatedly get the same message, just rewritten differently. The key message is not be trapped by the paper details, but understand that this paper is just one single point in the academic sphere.

Article Links

- ▶ <https://dissertation-help.co.uk/business-management-dissertation-topics>
- ▶ Zhang, X. and Xu, L. (2021), Firm life cycle and debt maturity structure: evidence from China. *Account Finance*, 61: 937-976. <https://doi.org/10.1111/acfi.1>
- ▶ Varian, H. R. (2016). How to build an economic model in your spare time. *The American Economist*, 61(1), 81-90.
- ▶ <https://terrytao.wordpress.com/career-advice/dont-prematurely-obsess-on-a-single-big-problem-or-big-theory/>
- ▶ <https://www.youtube.com/watch?v=733m6qBH-jI>
- ▶ <https://www.youtube.com/watch?v=Uumd2zOOz60>