EE 459:

Seminar in International Trade Theory and Policy

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- The course aims to strengthen research capability of students

- Strengthening research capability involves

    - developing research question(s),
    - applying relevant economic theories,
    - finding appropriate tools, and
    - **doing a proper research paper**
    - Presentation / Discussion

- **Research Paper:**

1. Abstract
2. Introduction
    - Introduction is composed of two key elements, namely significance of problem and research objective(s)
3. Literature Review
4. Research Methodology
5. Data Sources
6. Results (Analysis)
7. Conclusion and Policy Inferences

Date	Topics	Read
25/01/21	Course outline Topics relevant to International Economics Review literature Methodology and data sources	Nikolov, P (2013). Dudenhefer, P. (2009)
1/02/21	Individual discussion about topic, research question(s) and possible methodology	
8/02/21	**Students submit topic and research question(s)**	
15/02/21 – 1/03/21	Individual discussion about proposal, including research question(s), methodology and data	
8/03/21	**Proposal presentation**	
22/03/21	Result sections, policy inferences and abstracts	Nikolov, P (2013). Dudenhefer, P. (2009), Part IV
29/03/21-26/04/21	Individual discussion about results	
3/05/21	**Presentation: Result section**	
10/05/21	Individual discussion	
17/05/21	**A first draft presentation (submit a first draft)**	
7/06/21****	A completed draft submission	

- Proposal (topics 2-5)

2. Introduction
   - Introduction is composed of two key elements, namely significance of problem and research objective(s)
3. Literature Review [at least 10 papers]
4. Research Methodology
5. Data Sources

Students are expected to deliver a proposal with **the maximum length of 20 pages** + Presentation [15 minutes per group]

A-4 **Format Times New Roman 12, Single Line Spacing**

Date: **8/03/21**

- Present findings [**Sections 2, 4, 5, 6**]

2. Introduction
4. Research Methodology
5. Data Sources
6. Results (Analysis)

Students are expected to present the research progress.

Each group has a discussant, who will provide constructive comments.

PPT presentation is required.

15 minutes for research presentation and 10 minutes for discussion [results].

Date: 3/05/21

- **First Draft (Sections 1-7)**

1. Abstract
2. Introduction
3. Literature Review
4. Research Methodology
5. Data Sources
6. **Results (Analysis)**
7. **Conclusion and Policy Inferences**

should be shorten

The maximum length of the draft is 45 pages, including all tables, figures, appendices, and references.

PPT presentation is required.

Discussant [2 pages written comment, consisting of a paper's summary, strong points of the paper, the weak points and suggestions.

Date: 17/05/21

- Final Draft (7/06/21****), incorporating all relevant comments

The maximum length would be 45 pages including all tables, figures, appendices, and references.

- **2 persons per group**
- **Evaluation**

- Proposal (including presentation)	15%
- Result section (including presentation)	15%
- A draft paper	35%
- A completed draft	25%
- Discussion	10%

- Topics relevant to International Economics [Trade and Finance]
- Interesting and feasible [3 months to finish your research]
- Some contributions [originality]

International Economics

- Trade theories (Comparative Advantage, Hecksher-Ohlin etc.) ---- how to measure comparative advantages? [next slide]
- Tariffs --- impacts of tariffs (Unilateral) ---- nominal tariffs or effective tariffs [next slide] ---- trade (stimulating firms' productivity? Exports? Welfare? Etc.) – determinants. Non-tariff barriers [Quota, technical barrier to trade; SPSS (sanitary measures)] --- affecting on exports [next slide]
- *Preferential trade area (PTA), Free trade area (FTA) --- effect of FTAs [exports, trade, productivity improvement]* [next slide]
- FDI ---- what determine direct investment [Resource seeking FDI, Market seeking FDI, Asset seeking FDI macroeconomic environment etc] which industry received benefits What are impacts of direct investment?[growth, labour productivity] **Role of BOI? [dummy (using industrial census, do index] [next slide]**
- Technology spillover; generating productivity gap???

- Export – Import structure [what determine exports – imports / Export similarity/complementarity / export diversification (determinants / impacts on key variables in an economy)

- Product space (complexity --- how it changes and how it impacts economic growth)

  https://atlas.cid.harvard.edu/

- Exports – Imports of services [what are the key determinants? , impacts to an economy]

- **Current situation?** [impacts of trade war [change value chains / change FDI movements in the region --- data analysis [trade map] https://www.trademap.org/Index.aspx / Impacts of COVID-19

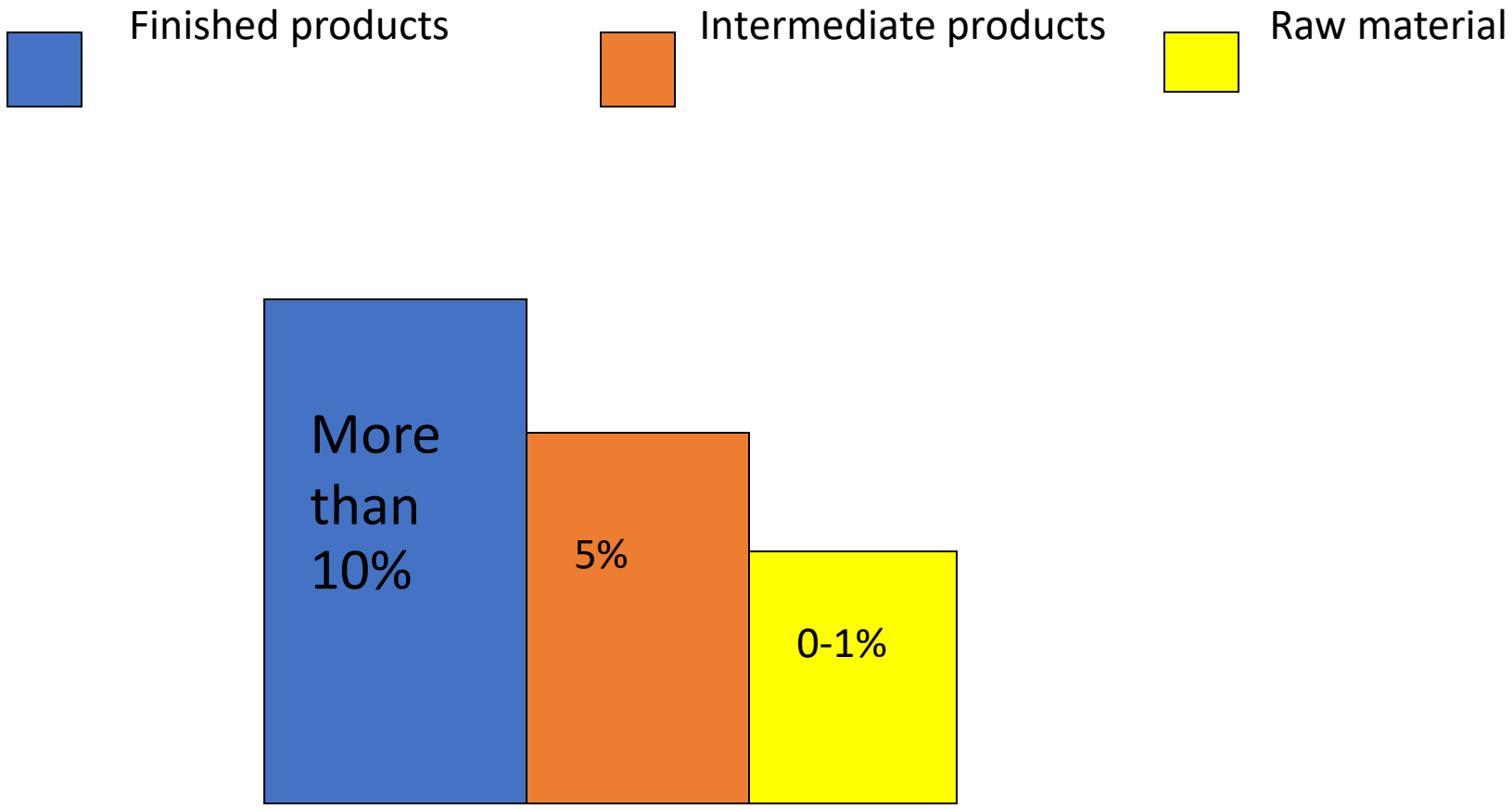
Table 3-8 **Alternative RCA Indices**

$$RCA_{i,c,t} = BI_{i,c,t} = \left(\frac{X_{i,c,t}}{\sum_c X_{i,c,t}}\right) / \left(\frac{\sum_i X_{i,c,t}}{\sum_c \sum_i X_{i,c,t}}\right)$$ (Balassa, 1965)

Indices		Comparative Disadvantage	Comparative Advantage
UNIDO (1982)	$RCA^{U}_{i,c,t} = \frac{X_{i,c,t} - M_{i,c,t}}{X_{i,c,t} + M_{i,c,t}}$	(-1,0)	(0,1)
Vollrath (1991)	$RCA^{V}_{i,c,t} = RXA_{i,c,t} - RMA_{i,c,t}$ $RXA_{i,c,t} = \left(\frac{X_{i,c,t}}{\sum_i X_{i,c,t} - X_{i,c,t}}\right) / \left(\frac{\sum_c X_{i,c,t} - X_{i,c,t}}{\sum_i \sum_c X_{i,c,t} - \sum_i X_{i,c,t} - \sum_c X_{i,c,t}}\right)$ $RMA_{i,c,t} = \left(\frac{M_{i,c,t}}{\sum_i M_{i,c,t} - M_{i,c,t}}\right) / \left(\frac{\sum_c M_{i,c,t} - M_{i,c,t}}{\sum_i \sum_c M_{i,c,t} - \sum_i M_{i,c,t} - \sum_c M_{i,c,t}}\right)$	(-∞,0)	(0,∞)
Laursen (1998)	$RCA^{L}_{i,c,t} = \frac{BI_{i,c,t} - 1}{BI_{i,c,t} + 1}$	(-1,0)	(0,1)
Hoen and Oosterhaven (2006)	$RCA^{HO}_{i,c,t} = \frac{X_{i,c,t}}{\sum_i X_{i,c,t}} - \frac{\sum_c X_{i,c,t}}{\sum_c \sum_i X_{i,c,t}}$	(-1,0)	(0,1)
Yu, Cai and Leung (2009)	$RCA^{YCL}_{i,c,t} = \left(\frac{X_{i,c,t}}{\sum_i \sum_c X_{i,c,t}}\right) - \left(\frac{\sum_c X_{i,c,t} \times \sum_i X_{i,c,t}}{\sum_i \sum_c X_{i,c,t} * \sum_i \sum_c X_{i,c,t}}\right)$	(-0.25,0)	(0,0.25)
Gnidchenko and Salnikov (2015)	$RCA^{GS}_{i,c,t} = RNX_{i,c,t} \times RT_{i,c,t} \times RO_{i,c,t}$ $RNX_{i,c,t} = \frac{X_{i,c,t} - M_{i,c,t}}{X_{i,c,t} + M_{i,c,t}}$ $RT_{i,c,t} = \left(\frac{X_{i,c,t} + M_{i,c,t}}{\sum_i X_{i,c,t} + \sum_i M_{i,c,t}}\right) / \left(\frac{\sum_c X_{i,c,t} + \sum_c M_{i,c,t}}{\sum_i \sum_c X_{i,c,t} + \sum_i \sum_c M_{i,c,t}}\right)$ $RO_{i,c,t} = \left(\frac{\sum_i X_{i,c,t} + \sum_i M_{i,c,t}}{GDP_{c,t}}\right) / \left(\frac{\sum_i \sum_c X_{i,c,t} + \sum_i \sum_c M_{i,c,t}}{\sum_c GDP_{c,t}}\right)$	(-∞,0)	(0,∞)

Note: X and M refer to exports and imports. i, c and t refer to product i, country c and time t, respectively.
Source: Author's summarisation

Cascading Tariff



https://trains.unctad.org/Forms/MeasureView.aspx?mode=modify&action=search

Available search criteria

Selected search criteria

Measures: **Sanitary and Phytosanitary [SPS] [A], Technical Barriers to Trade [TBT] [B], Pre-shipment inspection [INSP] [C], Contingent trade protective measures [CTPM] [D], Quantity control measures [QC] [E], Price control measures [PC] [F], Other measures [OTH] [G,H,I,J,K,L,M,N,O], Export-related measures [EXP] [P]**

Reset to defaults

Country(ies) imposing: **Any**

Partner(s) affected: **Any [Include the category "All partners"]**

Date(s): **15/10/2020 [in force]**

Product(s): **Any**

Modify

Search result

Numbers cannot be compared

		CTPM	EXP	INSP	OTH	PC	QC	SPS	TBT
Africa	Algeria		13	4	1	1	34	114	122
	Benin		20	12	3	5	20	27	34
	Botswana		58	1	2	1	18	61	85
	Burkina Faso		14	3	2	1	8	39	5
	Cameroon		90			10	29	42	51
	Cabo Verde		3	1	3	8	4	31	28
	Côte d'Ivoire	3	14	1		4	8	69	7
	Ethiopia		139	1	7	3	32	103	213
	Ghana		35	7		7	26	20	25
	Guinea		75	7	3	22	7	35	19
	Liberia, Republic of		45	2	2	10	21	23	21
	Mali		68	3	4	8	17	34	27
	Mauritania		42	4	7	4	23	98	55

Trade Agreement

- *Preferential trade area (PTA)*: trading partners grant partial preferential tariff reductions to each other. (bilateral or more than 2 countries)

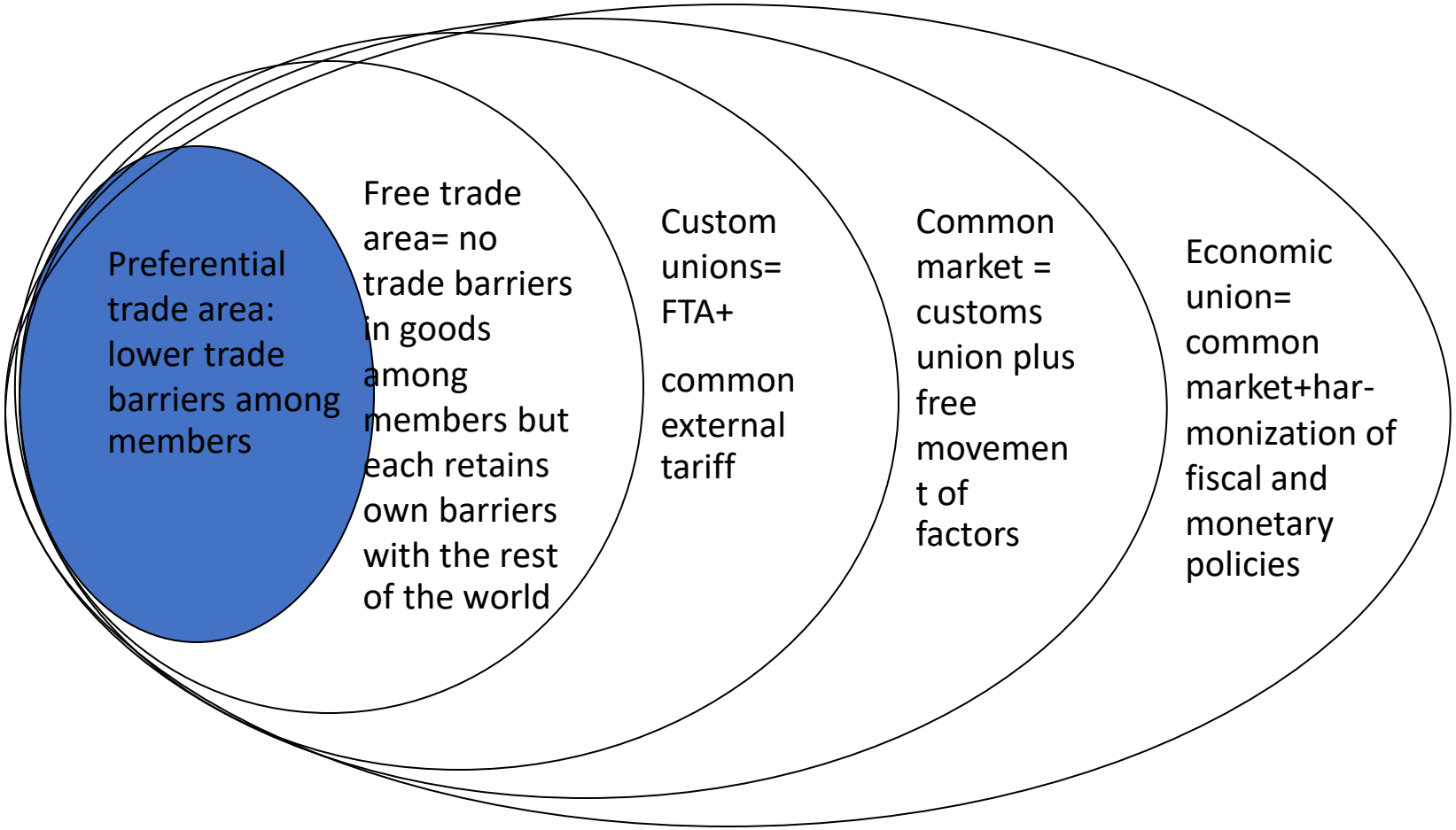
- *Free trade area (FTA)*: members eliminate all tariffs and nontariff barriers among themselves but each member can set its own tariff rates on nonmembers. (0 tariff and nontariff barriers)

- *A custom union* is a free trade area but members adopt a common external tariff on nonmembers.

- *A common market* goes beyond a custom union by allowing free movements of factors of production.

- *Economic union* involves integrating national economic policies, like fiscal and monetary policies.

Economic Integration



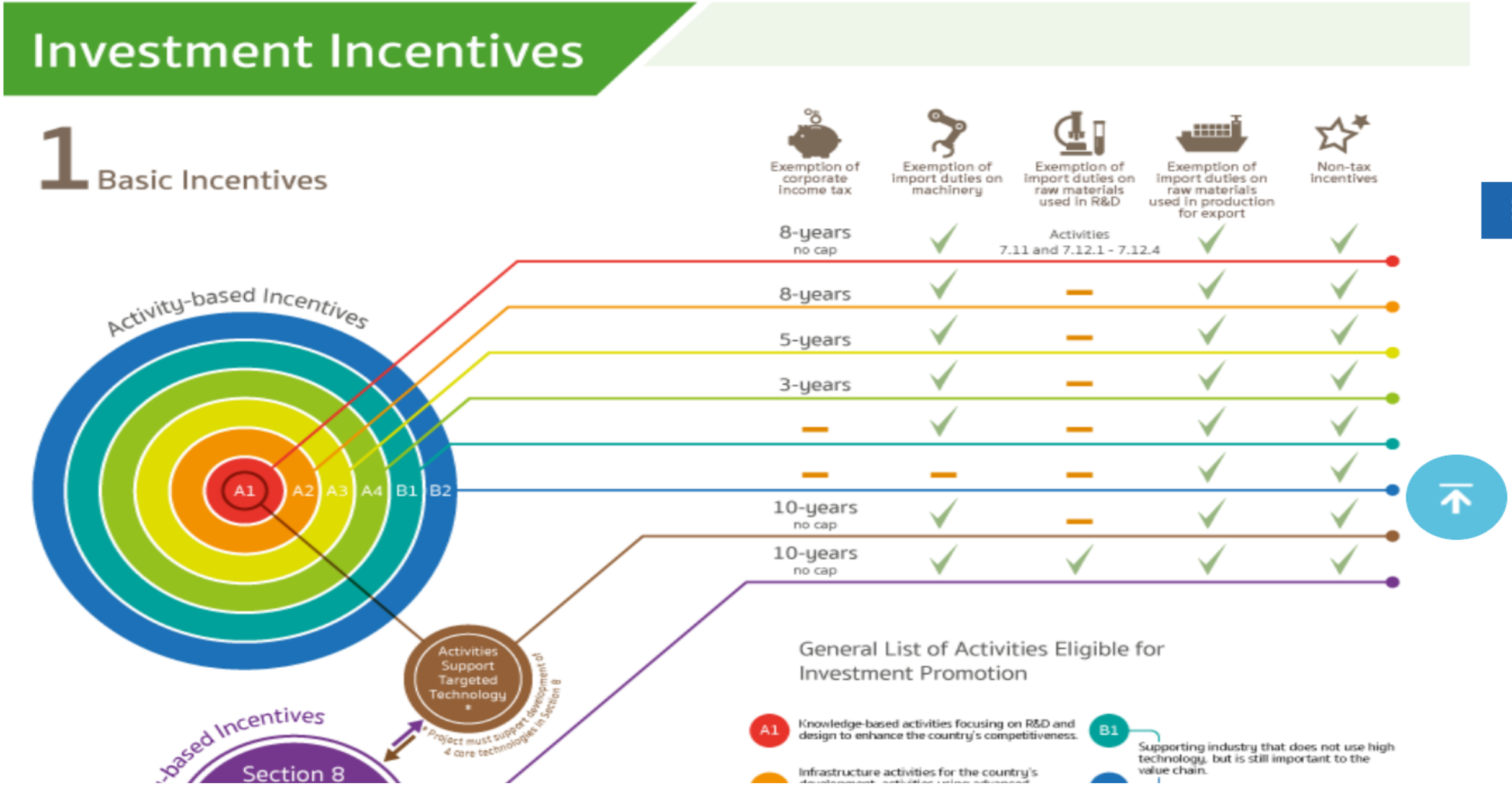
Next slide

- These amount to a total of 24 FTAs, of which **13 have come into force. + RCEP**

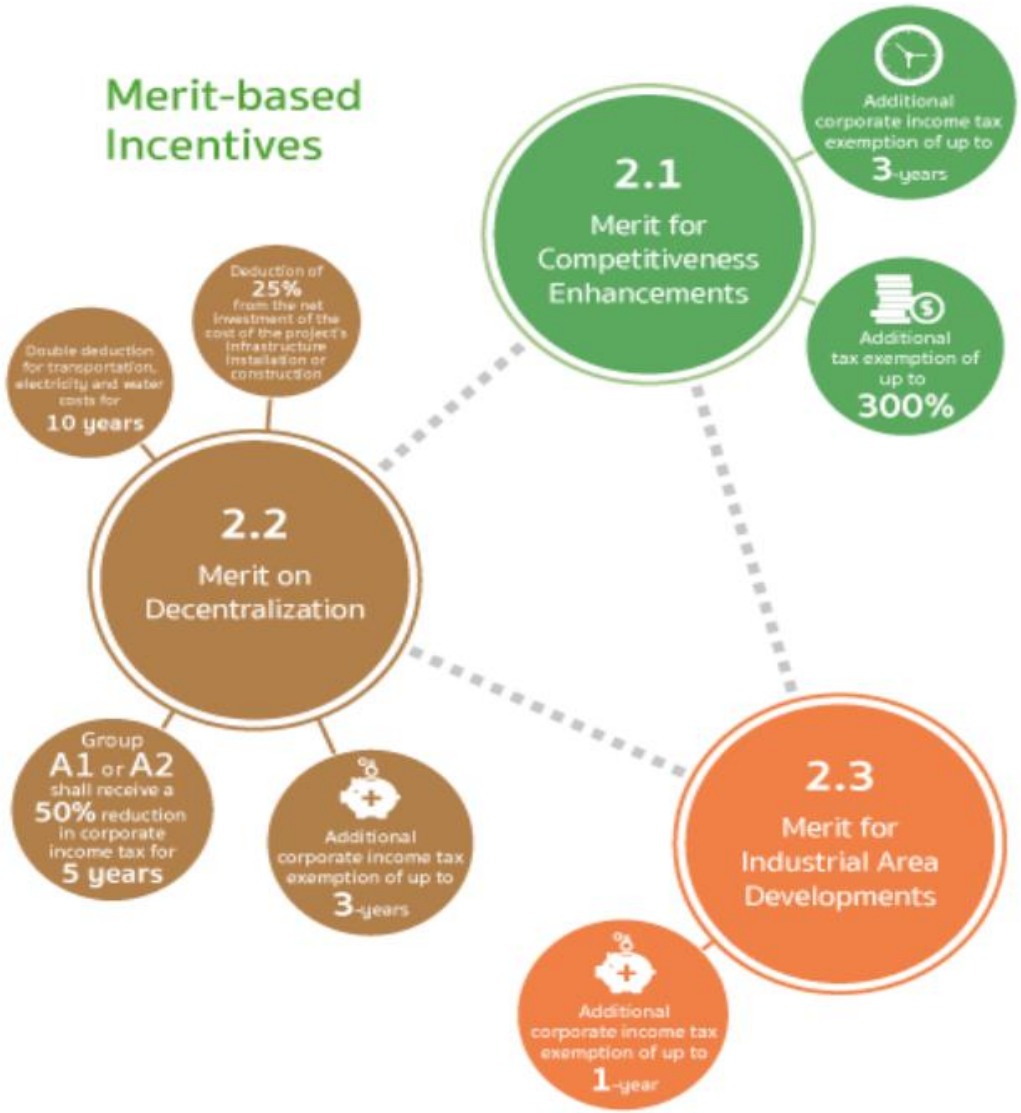
- They comprise the ASEAN Free Trade Area (AFTA), the Thailand–Australia FTA (TAFTA), the Thailand–New Zealand FTA (TNFTA), the Japan–Thailand Economic Partnership Agreement (JTEPA), ASEAN–China FTA (ACFTA), the ASEAN-Australia-New Zealand FTA (AANZFTA), the ASEAN–Japan FTA (AJFTA), the ASEAN–Korea FTA (AKFTA), and the ASEAN–India FTA (AIFTA). Tariff cuts have been substantial, covering more than 80% of tariff lines and having been offered since 2010

- For another three FTAs (i.e. the Thailand-Peru FTA, the Thailand-Chile FTA, and ASEAN-India FTA), substantial tariff cuts have taken place only in recent years, i.e. in 2015 and 2016.

https://www.boi.go.th/index.php?page=incentive



Merit-based Incentives



Merit for Competitiveness Enhancement

Additional Cap

Percentage of Investment or Expense

Research, Technology Development and Innovation: In-house, outsourced in Thailand or joint R&D with overseas institutes	300%
Donations to technology and human resource development funds, educational institutes, specialized training centers, R&D institutes or governmental agencies in the S&T field in Thailand, as approved by the Board	100%
IP acquisition/licensing fees for commercializing technology developed in Thailand	200%
Advanced technology training	200%
Development of local suppliers with at least 51% Thai shareholding in advanced technology training and technical assistance	200%
Product & packaging design: In-house or outsourced in Thailand, as approved by the Board	200%

Additional CIT Exemption

(with additional cap)

1 year	1% or not less than 200 million baht whichever lower
2 years	2% or not less than 400 million baht whichever lower
3 years	3% or not less than 600 million baht whichever lower

International Finance

- Balance of Payments and its components
  - Current account [Ex - Im, Remittances [Determinants and impacts], investment income?]
  - Capital flows [FDI / Port-folio; stock and bond; other investments] [determinants / impacts , country– region [synchronize???] [Inflows / outflows]
  - Capital control policies [how effective?? -- within a country / across countries]

https://www.imf.org/external/pubs/ft/wp/2015/wp1580.pdf -- paper

http://www.columbia.edu/~mu2166/fkrsu/ -- index

- Foreign exchange market [Spot and derivative markets -- forward / future markets] -- Survey [use/not use, why??]

Papers relating to capital controls

- Chinn, M.D. and Hiro Ito, 2006, "What Matters for Financial Development? Capital Controls, Institutions, and Interactions," Journal of Development Economics, Vol. 81, No. 1, pp. 163–92.

- De Gregorio, J., S. Edwards and R. Valdés, 2000, "Controls on Capital Inflows: Do They Work?," Journal of Development Economics, Vol. 63, No. 1, pp. 59–83.

- https://link.springer.com/article/10.1057/imfer.2016.11

- What determines exchange rates (Nominal / Real EX) --- misalignment?

  Capital outflows can help?? ---- de jure (relax capital outflow control matters?] -- BOT release 4 reasons (fundamental factors) why baht has become stronger

  - Low investment --- no imports – huge CA surplus
  - Hedging (SMEs did not hedge) -- behaviour
  - Fee of hedging
  - Synchronized FX in the region (huge offshore market)

  True??

- Determinants of cryptocurrency [next slide]

- Impacts of exchange rates on key economic variables [trade: both good and services, prices] [Look at both level and volatility]

- Impacts of crises [Financial and economics --- COVID-19] ---- change pattern of CA / Capital flows [investment ownership / composition of flows / which industry receive funds]

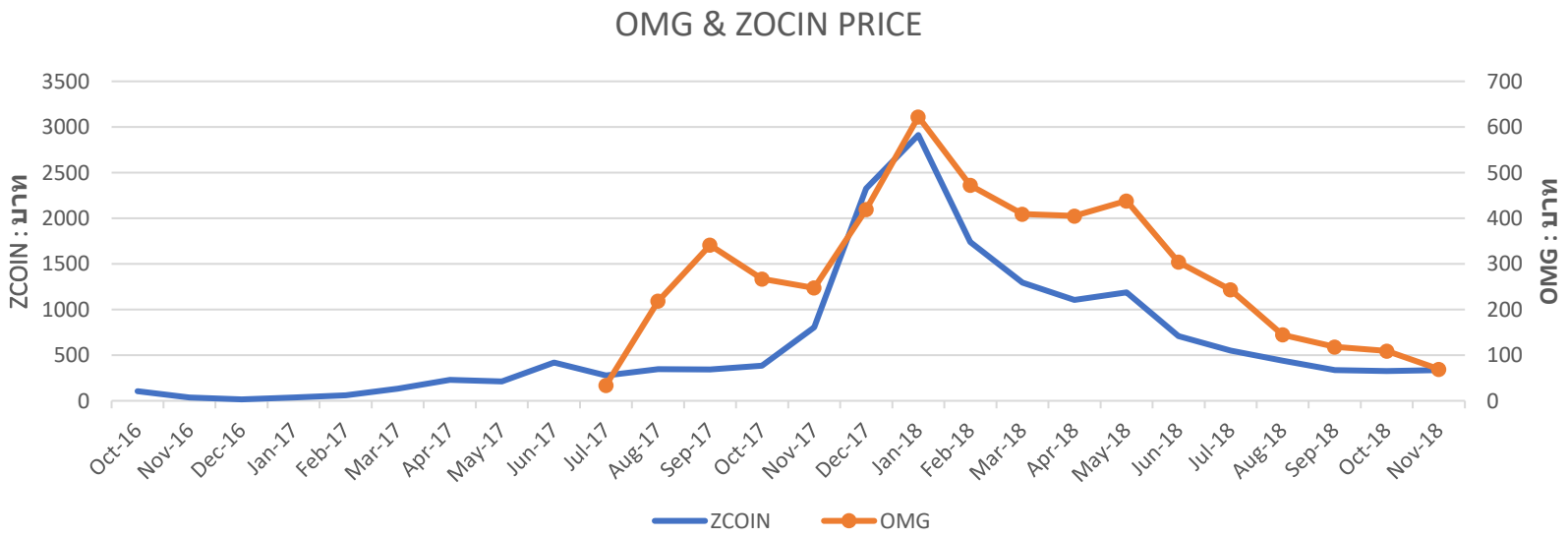
  --- [EX – exports nexus]

cryptocurrency

- ZCOIN (ZCOIN)
- OmiseGO (OMG)
- SIX.Network (SIX)
- Carboneum (C8)
- Everex (EVX)
- JFincoin
- Cryptovation

crypto	Average selling-buying per day (baht)	Market share %
OMG	1,517,900,692.83	92.78
ZCOIN	89,701,888.20	5.48
EVX	20,640,387.66	1.26
SIX	7,582,726.24	0.46
C8	40,315.03	0.02

Source : www.coingecko.com



Source : www.coingecko.com

Zhu, Y., Dickinson, D., & Li, J. (2017). Analysis on the influence factors of bitcoin's price based on VEC model. *Financial Innovation, 3*(1), 1-13. doi:10.1186/s40854- 017-0054-0

How you choose a topic?

- Example **trade** (1) US cut GSP (Generalized System Preference) to Thai exports 2 times, 573 items (8 digits HS code) on 25 April 2020 and 231 items in December 2020. Electronics, automotive parts, plastics, processed food. [we have 638 items left for GSP privileges]
- [interesting?, feasible within 3 months, contribution?

- Feasibility? How did others determine the effects? (Browse empirical literature 2-3 to check methodology) --- simple elasticity; regression

  พิไล บัวนุช(2538) [OLS]

  R. E.Baldwin และ T. Murray(2520)

  Check data (United State International Trade Commission (USITC), tariffs)

วิธีการคำนวณผลกระทบ (elasticity)

- **8 digits**

$$\frac{\%\Delta Q}{\%\Delta P} = \varepsilon$$

$$\%\Delta Q = \varepsilon \cdot \%\Delta P$$

$$Total \text{ Q changes } = \varepsilon \cdot \%\Delta P * existing \text{ GSP uses}$$

Scenarios ---- Price elasticity [when prices increase from tariff hike, how demand for imports in the US would respond]

ตัด GSP ครั้งที่ 1

	tariff	$
8501.61.00	2.5	34937
8504.10.00	3	9496257
8505.90.75	1.3	1277574
8507.20.40	3.5	
8507.20.80	3.5	12461712
8511.40.00	2.5	14428
8512.90.20	2.5	32643
8512.90.70	2.5	
8512.90.90	2.5	328452
8513.10.20	12.5	
8513.10.40	3.5	378802
8515.11.00	2.5	35162
8515.31.00	1.6	1554300
8516.60.60	2.7	73108
8516.90.05	3.7	160879

HS code		0.8	1.2
20	ผักและผลไม้ตัดแต่ง/ปรุงแต่ง	12.47	18.70
84	อุปกรณ์และเครื่องจักรกล	7.94	11.92
40	ยาง	3.24	4.85
85	เครื่องจักรและอุปกรณ์ไฟฟ้า	2.94	4.42
87	ยานยนต์	1.73	2.59
73	ผลิตภัณฑ์เหล็กหรือเหล็กกล้า	3.17	4.75
90	อุปกรณ์และชิ้นส่วนด้านทัศนศาสตร์, วิทยาศาสตร์, การแพทย์และศัล	3.86	5.80
39	พลาสติก	3.17	4.75
69	ผลิตภัณฑ์เซรามิก	4.26	6.39
19	ผลิตภัณฑ์ปรุงแต่งจากธัญพืช แป้ง สตาร์ช	2.75	4.13
29	เคมีภัณฑ์	2.39	3.58
74	ทองแดงและผลิตภัณฑ์ทองแดง	0.77	1.16
71	อัญมณี	1.79	2.69
รวม	1599.64	61.68	92.52
	% of Thai exports to US	0.18	0.28
	% of total Thai eports	0.025	0.038

- Regression

$$\exp orts_{ij,t} = f\left(X_i, X_j, GSP_{i\ receiving\ from\ j}\right)$$

$$\exp orts_{ij,t} = f\left(X_i, X_j, GSP_{i\ receiving\ from\ j}\right)$$

Dummy variable for representing GSP

or share of GSP_i used to *tototal* $\exp ort_i$ (de facto)

or de jure (tariffs -- GSP)

- Example 2: Due to baht appreciation, BOT relax capital outflows controls [especially cap of funds, which Thai investors can invest outside] e.g. relaxing direct investment funds to invest in foreign markets, from $0.2 million per year to 5 million per year and no cap for investors who invest in foreign assets, stock and bond.

- Questions --- relaxing capital outflow control help redress baht pressure?

- Check feasibility [how others did?]

  - How to measure capital control?
  - 2 steps or 1 step investigation

1. Building capital control index / dummy variables

2. Use other indices [Ito and Chinn index, IMF index]

Setting

Capital outflows = $\mathrm{f}\left(capital\ control\ index, X\right)$

$EX = f(X,$ capital outflows)

http://web.pdx.edu/~ito/Chinn-Ito_website.htm

http://www.columbia.edu/~mu2166/fkrsu/

Check data???

Literature survey [at least 10 papers]

- Literature review is not a summary of previous works.
- It should provide common features, key differences, and implications of previous studies.

Example: Capital control index

1. Group --- find its impacts (what methodology he/she use, country)
2. Another group -- no impact
3. With some condition

- Another way that you can write the literature

  - Grouping by methodology

    For example GSP ---

    --- Regression analysis

    --- Data analysis

    ---- Elasticity analysis

Review literature provides you an idea how others investigate an issue and **how you can contribute in the literature** [no studies in Thailand, no study (few studies) examine such issue, no study using this methodology before, improve methodology]

Methodology

- Where research methodology is concerned, students must consider both ‘appropriateness’ and ‘feasibility’.
- Good research methodology does not mean a complicated technique.

- Instead, it must fit well with your research question(s).

- Data analysis
- Building index
- Regression
- Survey / Questionnaire / interview