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Programme

INTERNATIONAL SEAFOOD TRADE: THE GLOBAL VALUE CHAIN OF PANGASIUS

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Introduction

Lecture provides overal picture of pangasius industry of Vietnam, a successful farming species in global seafood value chain:

- **Production history**
- **Production status**
- **International market**
- **Industry governance**
- **Challenges and discussing upgrading strategies**

GLOBAL VALUE CHAIN (GVC) ANALYSIS

GVC analysis describes the full range of activities that firms and workers perform to bring a product from its conception to end use and beyond;

GVC analysis provides an ability to access GVCs, to compete successfully and to "capture the gains" in terms of national economic development, capability building and generating more and better jobs to reduce unemployment and poverty.

(Gereffi, 1997)

FRAMEWORK OF GVC ANALYSIS

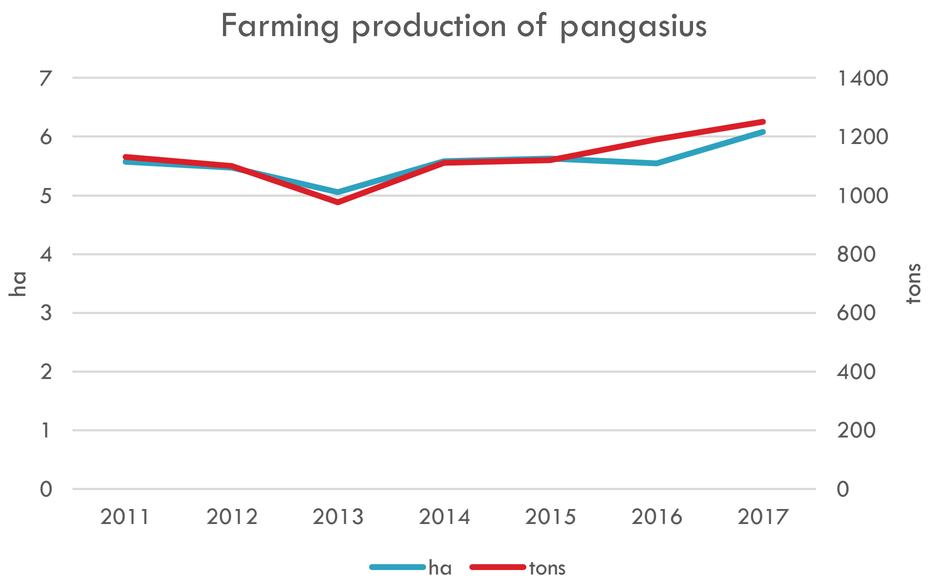
- **input-output structure**, describing the process of transforming raw materials into final products;
- **geographical consideration**, identifying the lead firms in each segment;
- **governance structure**, explaining how the value chain controlled and coordinated;
- **institutional context,** identifying how local, national and international conditions and policies shape the globalization in each stage;
- *upgrading*, describing the dynamic movement within the value chain by examining how producers shift between different stages of the chain.

History Remarks

- Farming practice since 1960s, floating cage in river (basa), for local consumption;
- 1990s: Industrial scale for processing and exporting, exported to USA;
- 2002: US imposed anti-tariff and restricting the use "catfish labeling" in the US market;
- Pangasius is an alternative name and become a global product;
- mid-2000s: penetrating to the EU, and become an increasingly ubiquitous item of seafood;
- End 2000s, the second war against pangasius in the EU market, claiming the questionable fish safety, farming sustainability, and labor matters;
- Pangasis is in list of red fish by WWF in 2010, lifted in 2012 after "fact check" and applying ASC (global certificate of WWF);
- In 2017, a third war against pangasius in EU market, appealing the environmental issues, leading a giant French retailer Carrefour stop stocking up on pangasius;
- Pangasius producers seeking the new markets in Asia, South America and Africa;

Production Status

- Pangasius production 2017: 1.2 millions tones, farmed in 6,078ha in Mekong delta
- Export value 2017 at €1,788 millions, to 137 country markets;
- 99% of total export is fillet and wholefish (frozen and fresh)
- Major markets: China, USA, EU ASEAN; Braxil, Mexico, Colombia, and Saudi Arabia;



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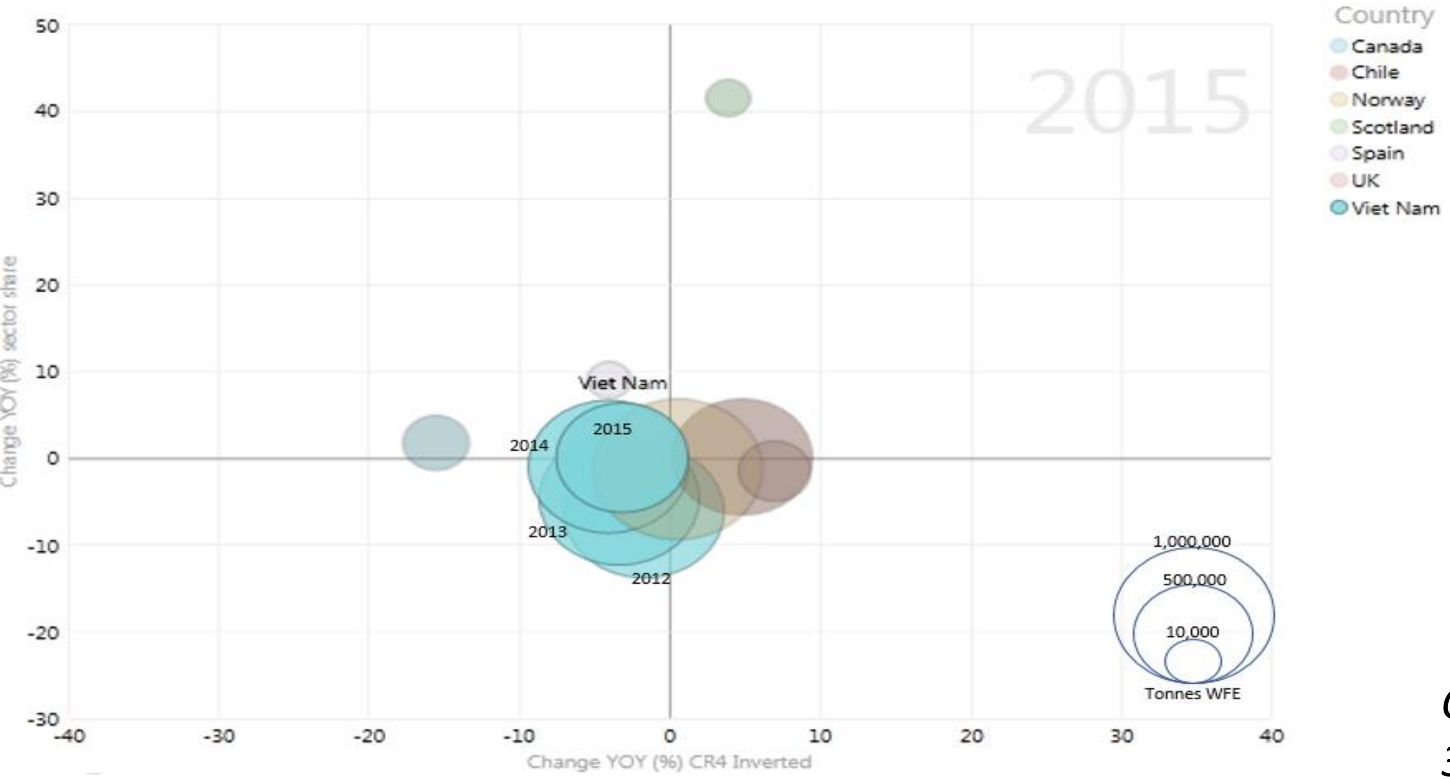
Sector Structure

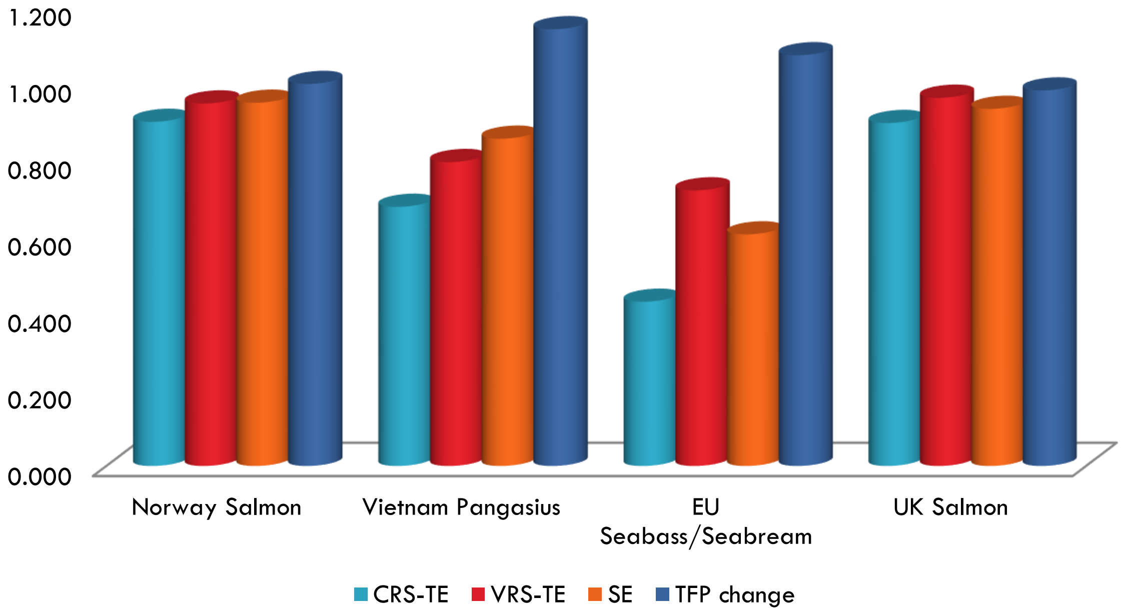


CR grown from 25.5 to 34.3% within 2011-2015

The x-axis presents year-on-year change in the inverted concentration ratio (CR4) for the Vietnamese pangasius export industry. CR4 calculated based on export value (USD million) of the top 4 largest exporters, 3 year rolling average. The y-axis shows year on year change in the share of the national sector output in the total global output for the species (3 year rolling average). Data sources: company reports, VASEP, FAOSTAT

Production efficiecy: a comparision

- Total factor productivity increase on average by 16%, due to:
- increases in technical efficiency
- improvement in technology (TC);
- Having 25% saving potential of asset use.



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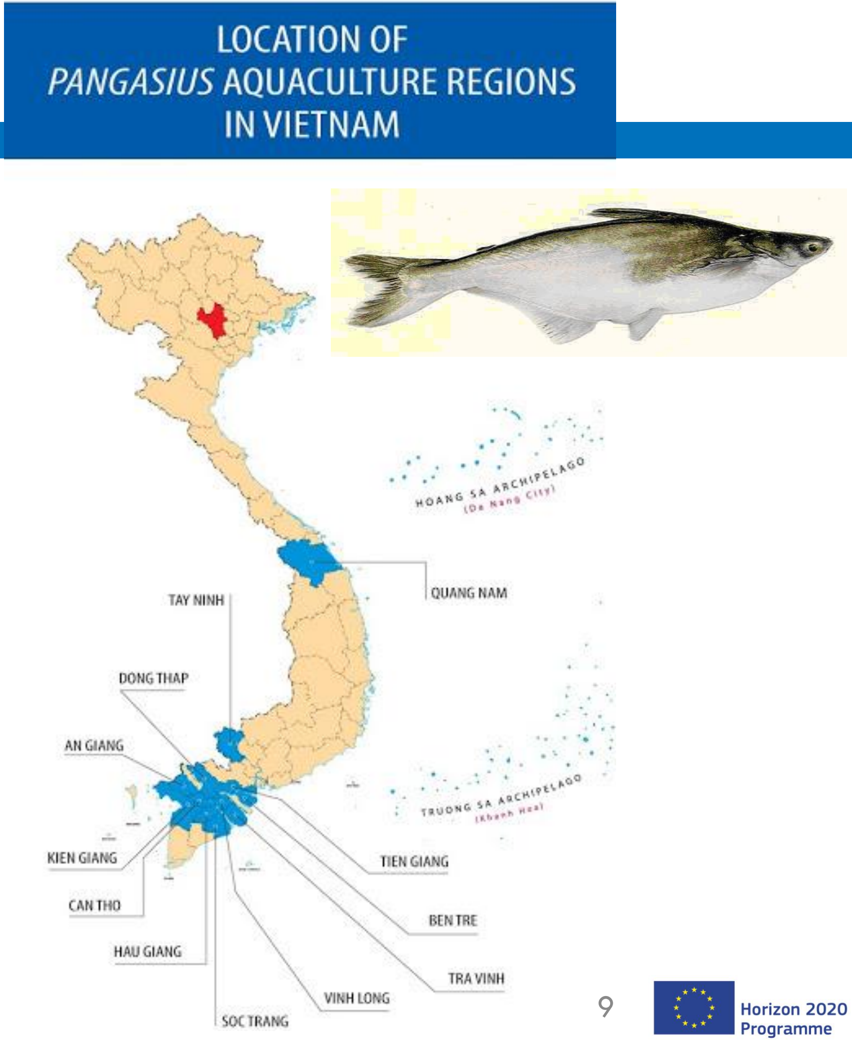
Farming Locations

Table : Pangasius production area and volumme in 2014 by provinces

No.	Province	Area (ha)	Volumm (tones)
1	Đồng Tháp	1,940.00	365,437.00
2	An Giang	707.60	292,524.70
3	Bến Tre	700.40	158,850.00
4	Cần Thơ	856.00	142,018.00
5	Vĩnh Long	423.17	101,331.90
6	Tiền Giang	117.00	35,837.00
7	Hậu Giang	167.33	35,185.80
8	Sóc Trăng	100.00	23,000.00
9	Tây Ninh	53.00	8,354.00
10	Trà vinh	11.30	6,277.00
11	Kiên Giang	11.00	1,938.00
	Total	5,086.80	1,170,753.40



Processing locations (2014 data)

Province	Processing unit	Export volume (thousand tonnes)	Export value (million USD)
An Giang	15	159	342
Dong Thap	12	115	277
Can Tho	22	166	350
Tien Giang	13	97	202
Hau Giang	1	6	14
Ben Tre	3	14	32
Vinh Long	2	11	19
Ho Chi Minh	19	37	78
Tra Vinh	2	6	16
Kien Giang	1	3	6
Vung Tau	1	1	2
Da Nang	2	3	4
Others	>47	42	87
Total	**>140**	**660**	**1,429**

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Market: Export market

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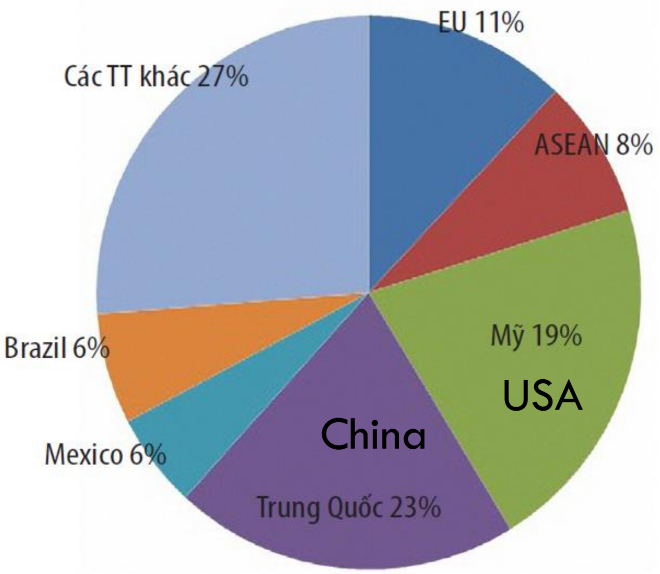
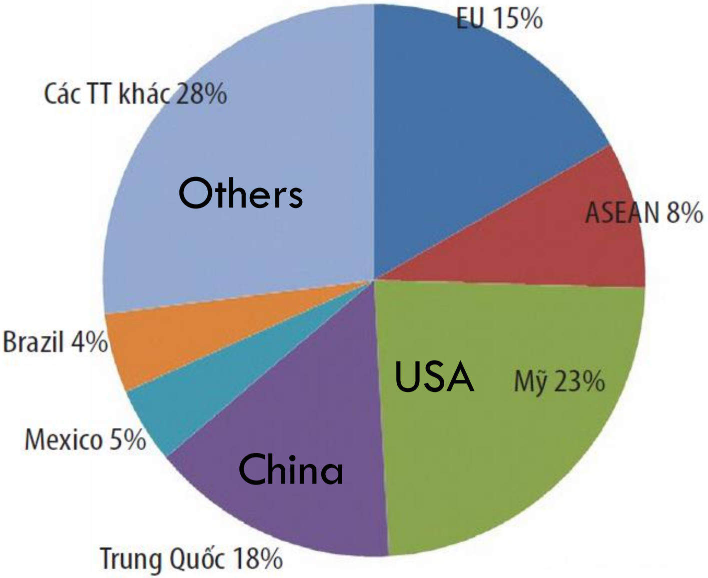
Export Market

Average value share 2016-2017





VASEP, 2018

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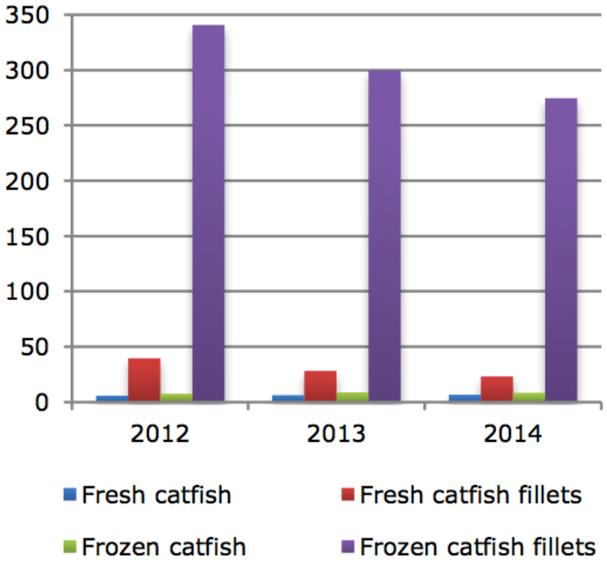
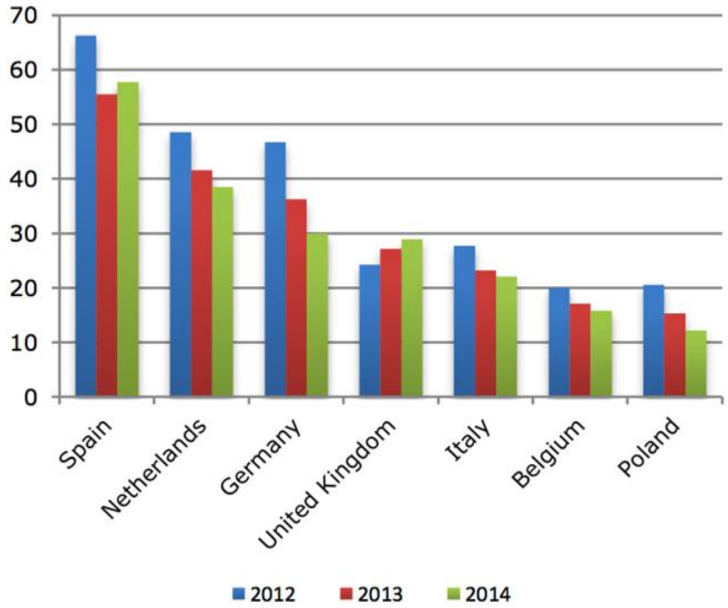
EU Import market (€ million)





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Top five pangasius exporter firms

No	Company	Value ($)	Share in pangasius export (%)	Share ín total seafood export of Vietnam (%)	Change (%) 2017/2016
2	HUNG VUONG CORP	120.560.842	6,74	1,45	17,9
3	BIENDONG SEAFOOD	114.198.369	6,39	1,37	-14,7
4	I.D.I CORP	96.702.691	5,41	1,16	58,1
5	NAVICO	85.300.347	4,77	1,03	6,4

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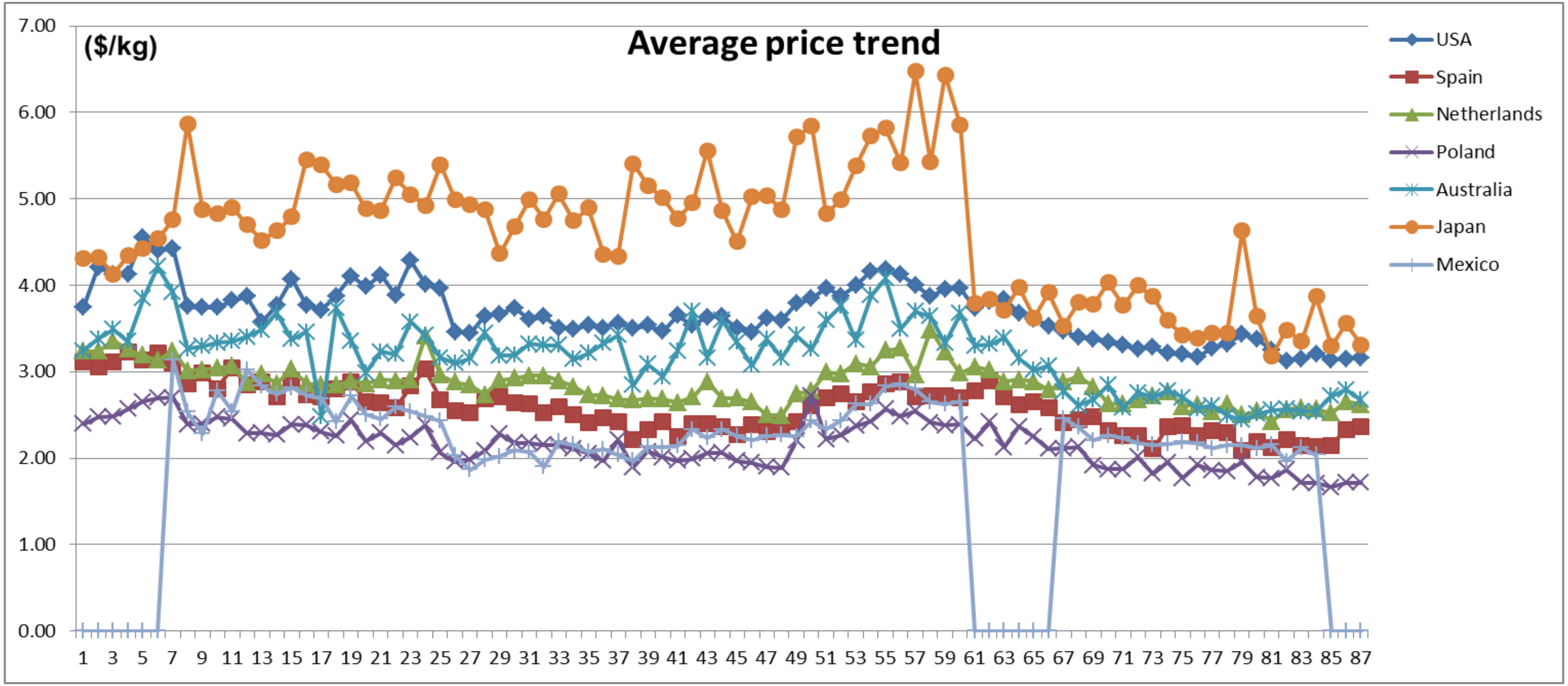
Export Price Variation (2007-2014)



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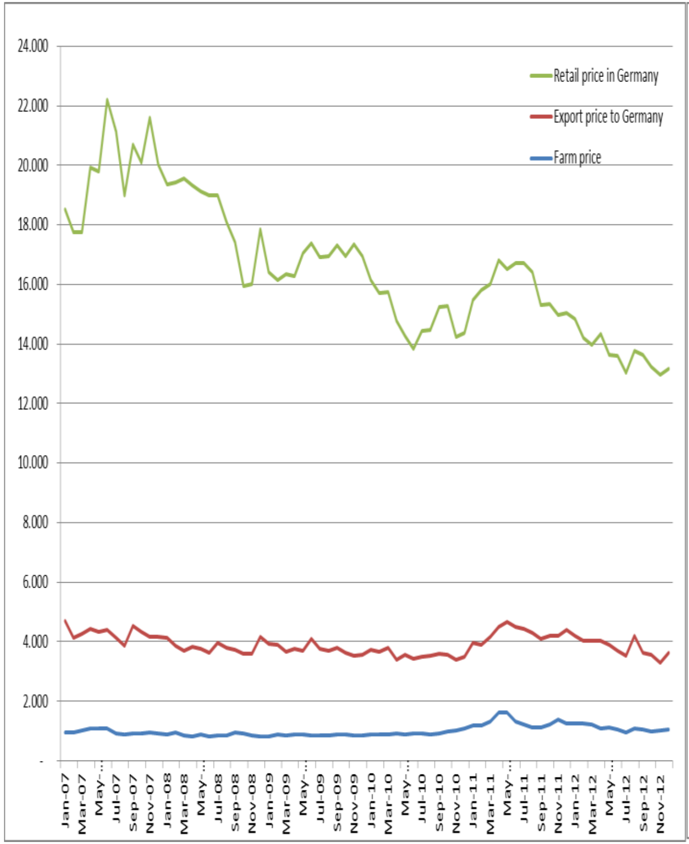
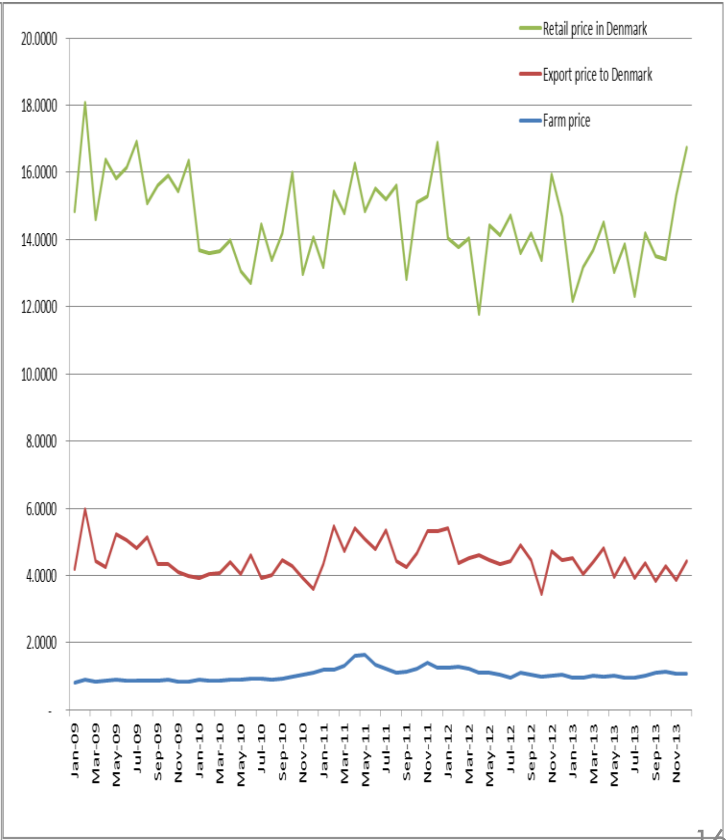
Value Chain Cointegration (price in $/kg)





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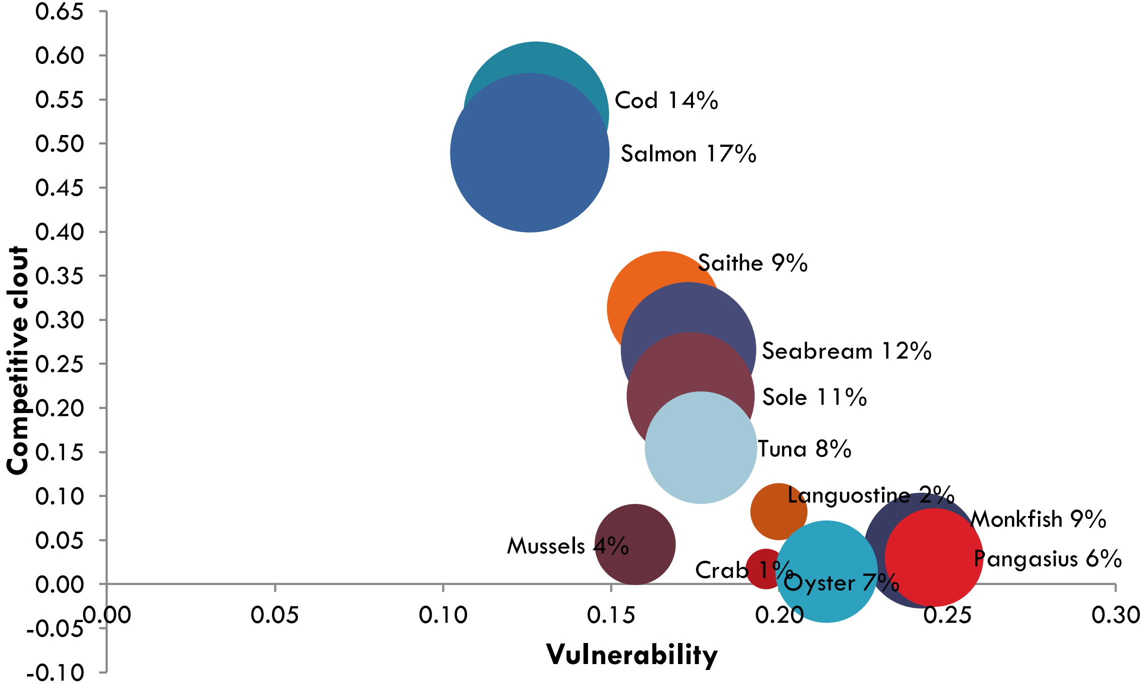
Market position



Thong at el. 2017

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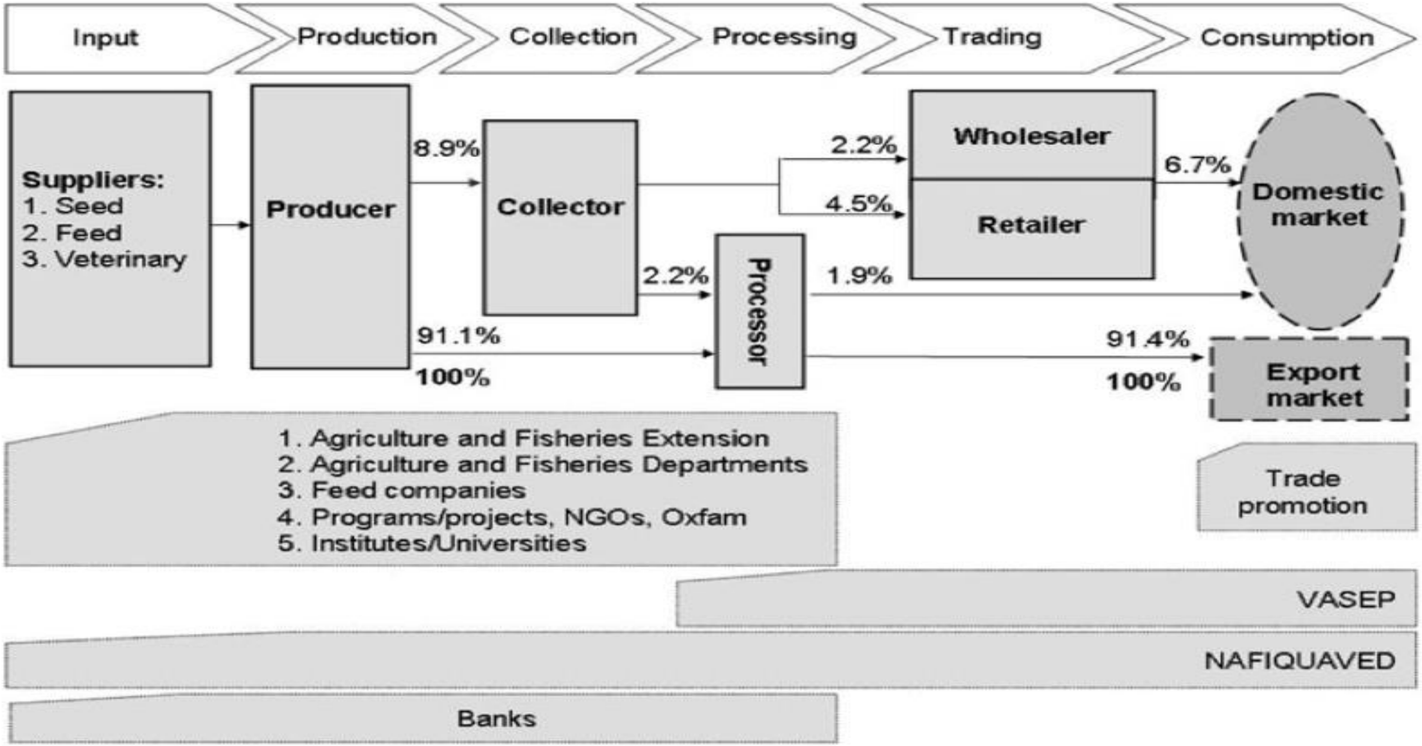
Input-Output Structure



Khiem & Bush, 2011

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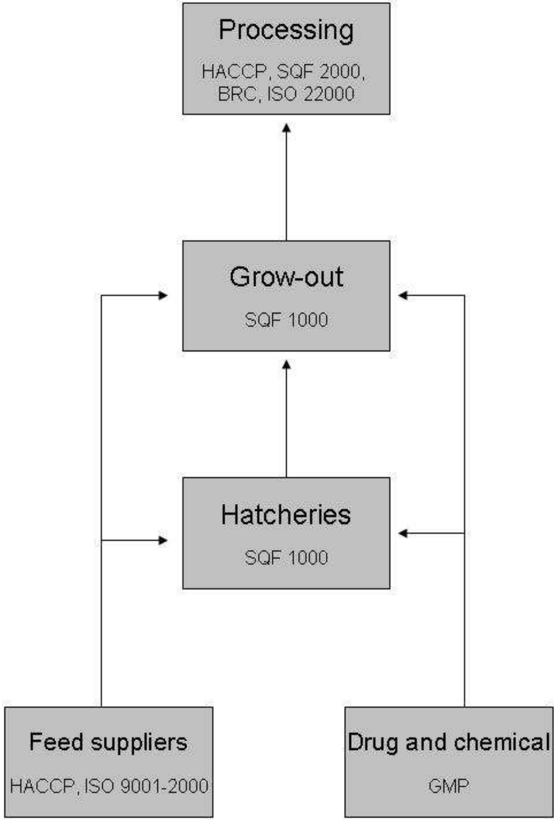
Governance of quality standard



- HACCP – Hazard Analysis and Critical Control Points Risk is a management system for the prevention of contamination by physical, chemical and biological hazards
- SQF 2000 – a food safety assessment programme covering processors, distributers and warehousing
- SQF 1000 - a food safety assessment programme for primary producers
- BRC – Food safety and quality criteria required for supplying to UK retailers and designed to standardizing food criteria and monitoring procedures.
- ISO 22000 – international food safety management system involving interactive communication between chain actors, and a system management approach based on the HACCP principles.
- ISO 9001-2000 – Quality management system for providing consistent products and services to meet customer expectations focusing on quantitative measurement of performance.
- GMP – Developed by the US Food and Drug Administration for verifying the safety and purity of drug and food products.

Khiem & Bush, 2011

Third party in the governance

Major Standards applicable to Vietnamese Pangasius production (>9 standards)		
Scheme	**Certifier**	Number of enterprises/area
GlobalGAP	GlobalGAP	45 locations (1237ha) in 2011
Best Aquaculture Practice (BAP)	Aquaculture Certification Council (ACC)	102ha (2011)
Pangasius Aquaculture Dialogue (PAD)	Aquaculture Stewardship Council (ASC)	14 (2013) & target of 50% enterprises (in 2015)
Butler's Choice	Butler's Choice (Dutch company)	1 company
Safe Quality Food 1000 (SQF 1000)	Food Marketing Institute	209ha (2011)
Naturland	Naturland (German agency)	?
AquaGap	Good Aquaculture Practices	89ha
VietGap	Vietnam	42 farmers (362ha, 2015)

Challenges

- Depending on international markets, exporting over 95% of production;
- Frozen fillet represents a majority (85-90%) in export;
- Internal conflicts between producers and exporters;
- Weak coordination, both horizontal and vertical dimension;
- Unfair competition in important markets: negative press in EU, tarriffs in US;
- Production advantage is limited and used mostly;

Discussion

How can pangasius industry of Vietnam upgrade in global value chain?

- **Production**
- Processing
- Product
- Marketing
- Governance
- ???

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Thank you!

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