

IOWA STATE UNIVERSITY

Department of Economics

Key Performance Indicators in Pork Production: An International Comparison



12th Leman China Swine Conference — Main Session

October 2023

Lee Schulz, Economics, Iowa State University

Derald Holtkamp, Veterinary Diagnostic and Production Animal Medicine, Iowa State University

Dermot Hayes, Economics and Finance, Iowa State University

Outline

- Data and model
- Analysis
 - Benchmarking cost of production, profitability, productivity, and prices
 - Year-over-year comparisons
 - Factors that give countries a competitive advantage or disadvantage
 - Marginal economic values



Data for Europe and Americas is from an international benchmarking network known as InterPIG



Great Britain	Agriculture and Horticulture Development Board (AHDB)
Austria	VLV Upper Austria
Belgium	Flemish Government and Boerenbond Belgie
Brazil	Embrapa Swine and Poultry: Two regions: Mato Grosso (MT) and Santa Catarina (SC)
Canada	Canadian Pork Council
Czech Republic	Institute of Agricultural Economics and Information (UZEI)
Denmark	SEGES
Finland	Atria
France	IFIP
Germany	Thuenen Institute and Interessengemeinschaft der Schweinehalter (ISN)
Hungary	AKI Research Institute of Agricultural Economics
Ireland	Teagasc
Italy	Research Centre for Animal Production (CRPA)
Netherlands	Wageningen Economic Research
Spain	SIP Consultors
Sweden	Svenska Pig
USA	Iowa State University

Data for Asia is from industry consultants and MSD staff in each country

- China
 - Modern, large-scale, single-story, non-filtered farms
 - Free of African swine fever virus (ASFV)
- Japan, South Korea, Vietnam
 - Modern, commercial farms of various sizes
 - Free of ASFV



Acknowledgement and special thank you for assistance in collecting data for Asia

- Hongyao Lin, MSD Animal Health in Asia Pacific and Sub Saharan Africa
- Di Gao, MSD Animal Health in China
- Prof. Le Thi Thanh Huyen, National Institute of Animal Science in Vietnam
- Dr. SeungYoon Lee, HanByol Farm Tech in South Korea
- Kyoko Akashi, MSD Animal Health in Japan
- Itsuro Yamane, AgriINFO Co., Ltd. in Japan

Model developed for analysis

- Production and economic model by country and phase of production
 - Breed-to-wean (breeding)
 - Wean-to-feeder (nursery/rearing)
 - Feeder-to-market (finishing)
- Results reported for the breed-to-market phase



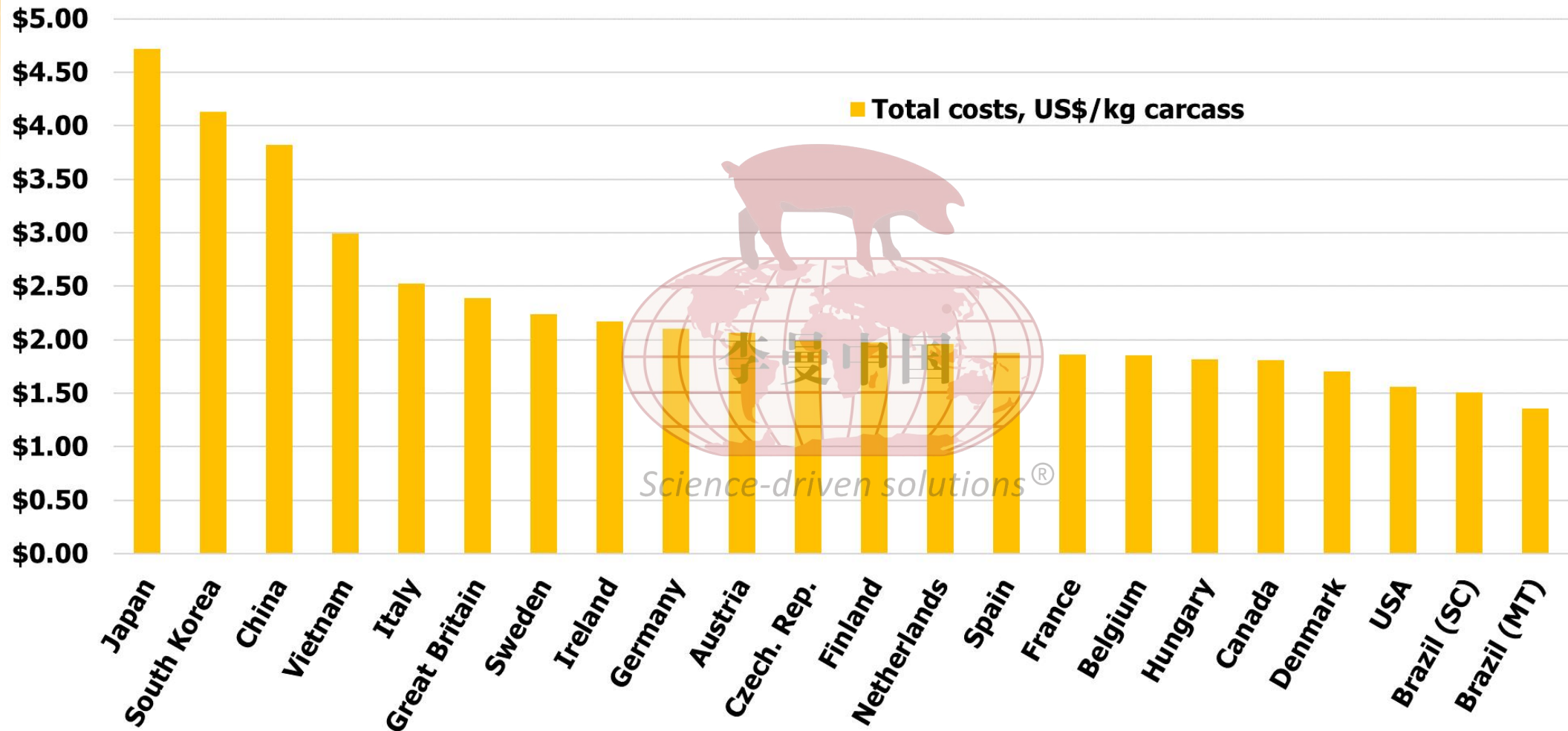
Outline

- Data and model
- Analysis
 - Benchmarking cost of production, profitability, productivity, and prices
 - Year-over-year comparisons
 - Factors that give countries a competitive advantage or disadvantage
 - Marginal economic values



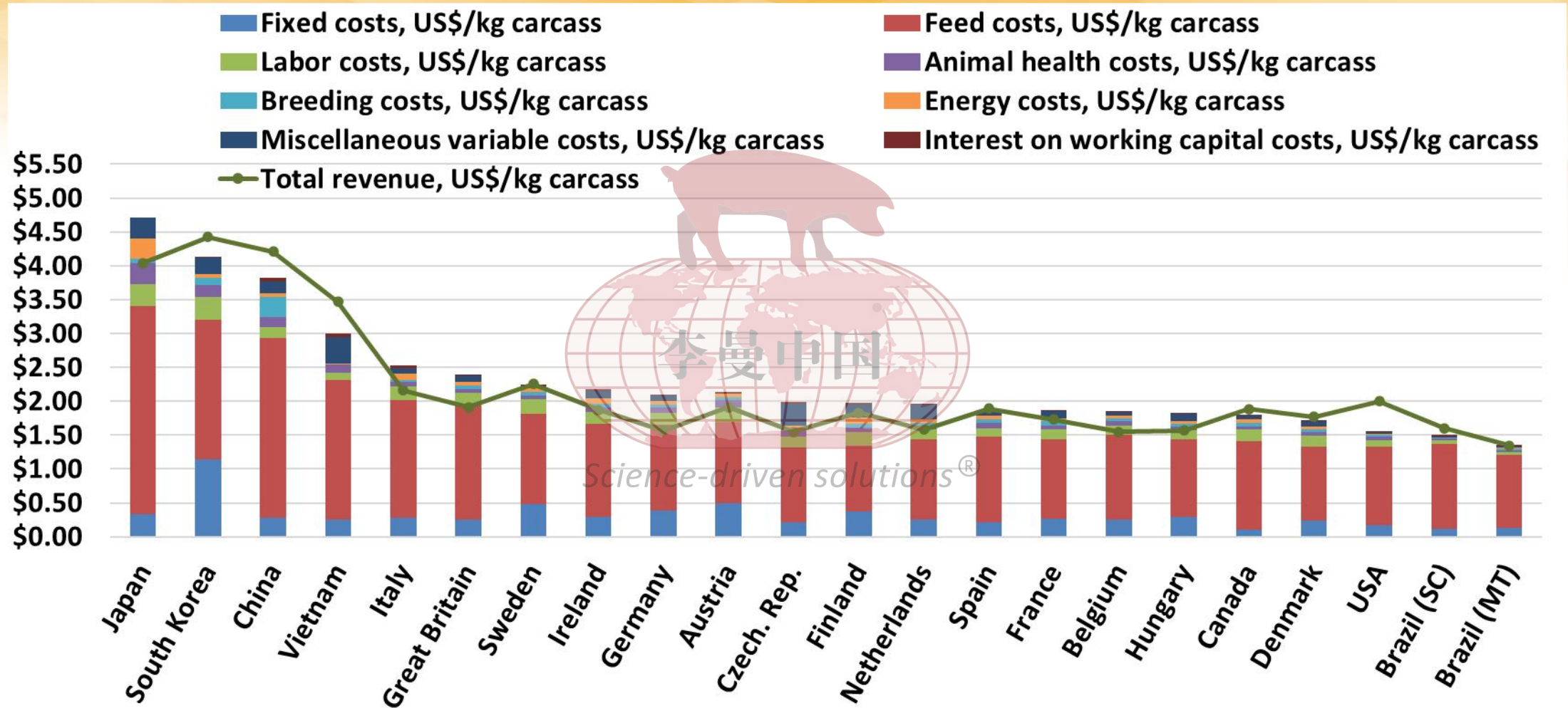
Cost of production

Breed-to-market, 2021



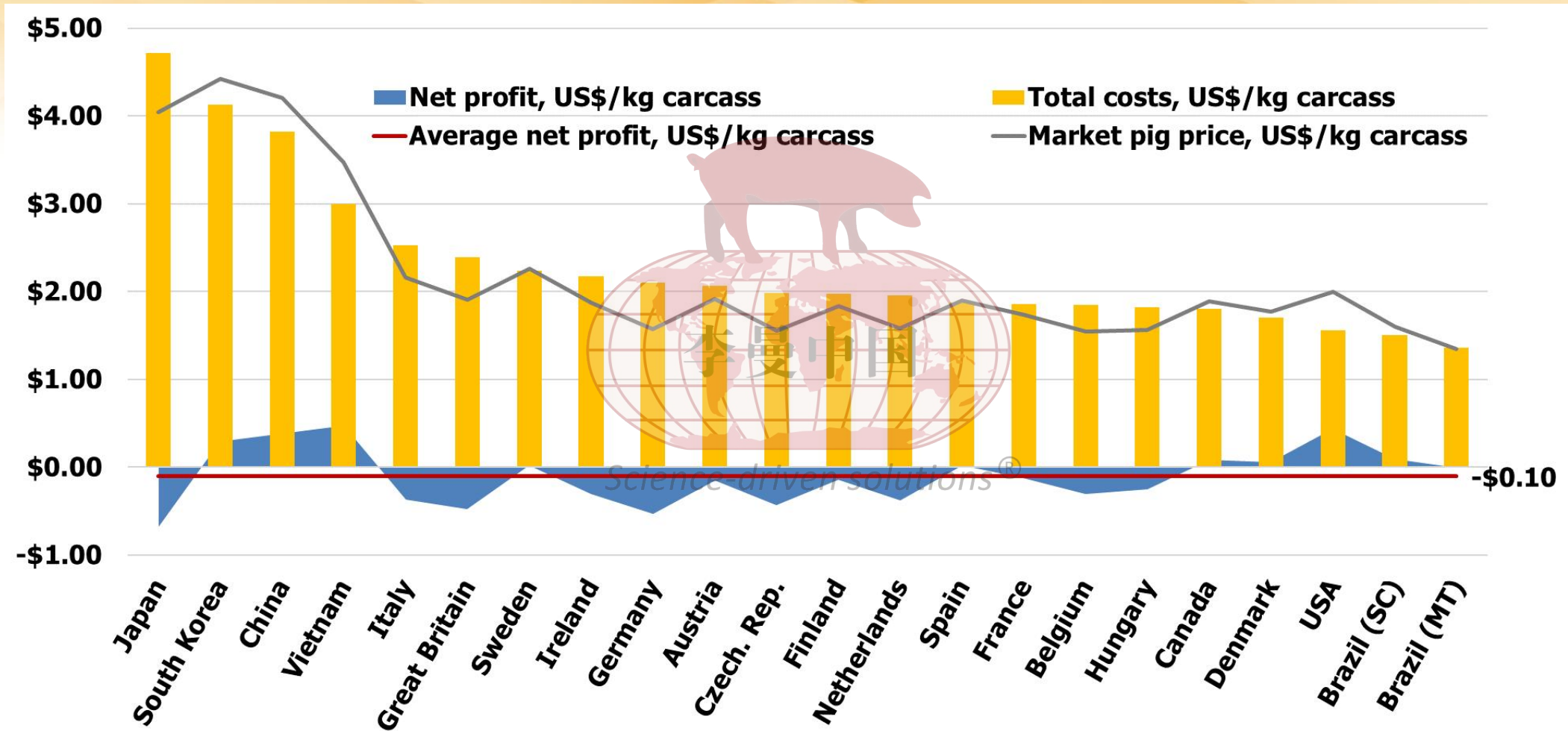
Detailed cost of production

Breed-to-market, 2021

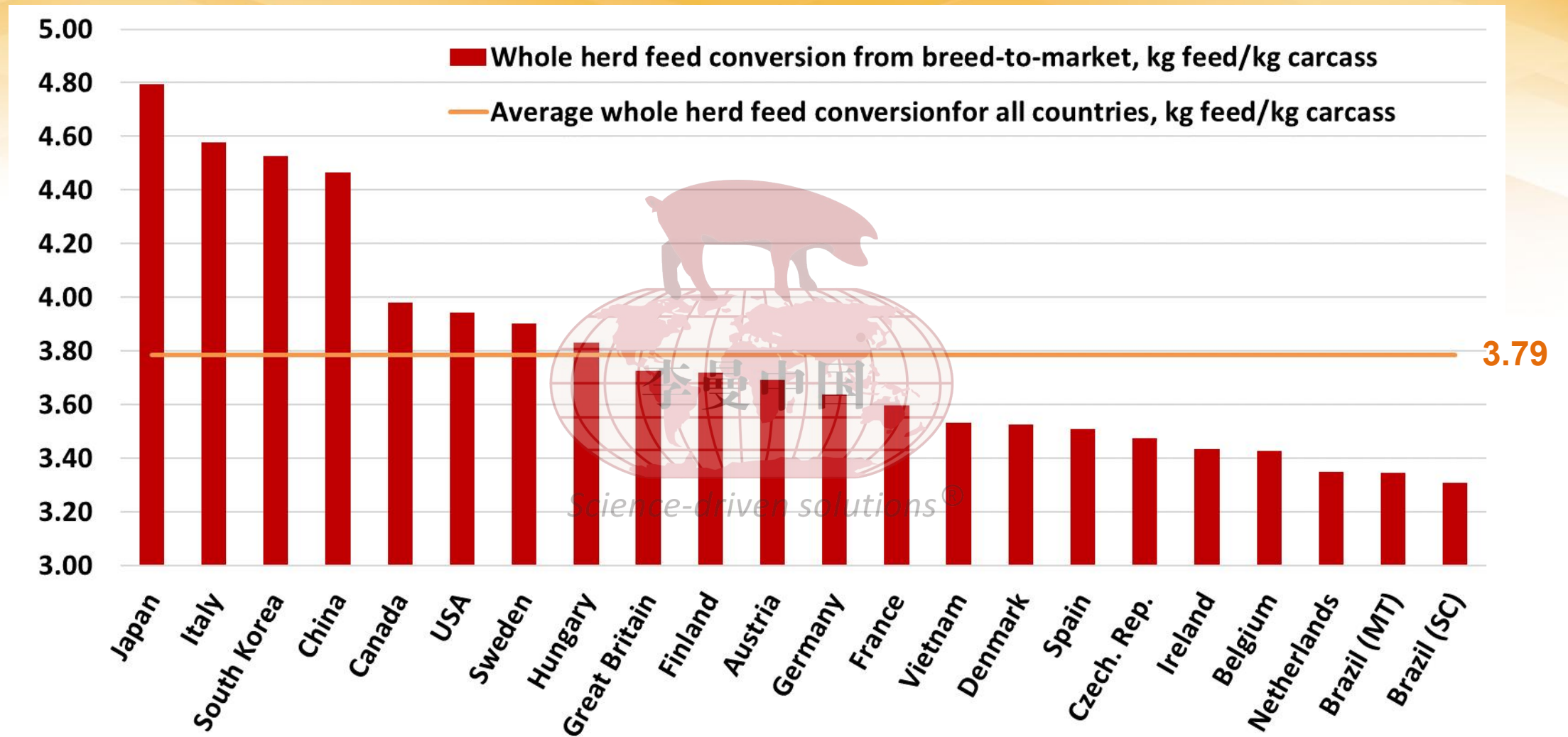


Cost of production, market pig prices and profit

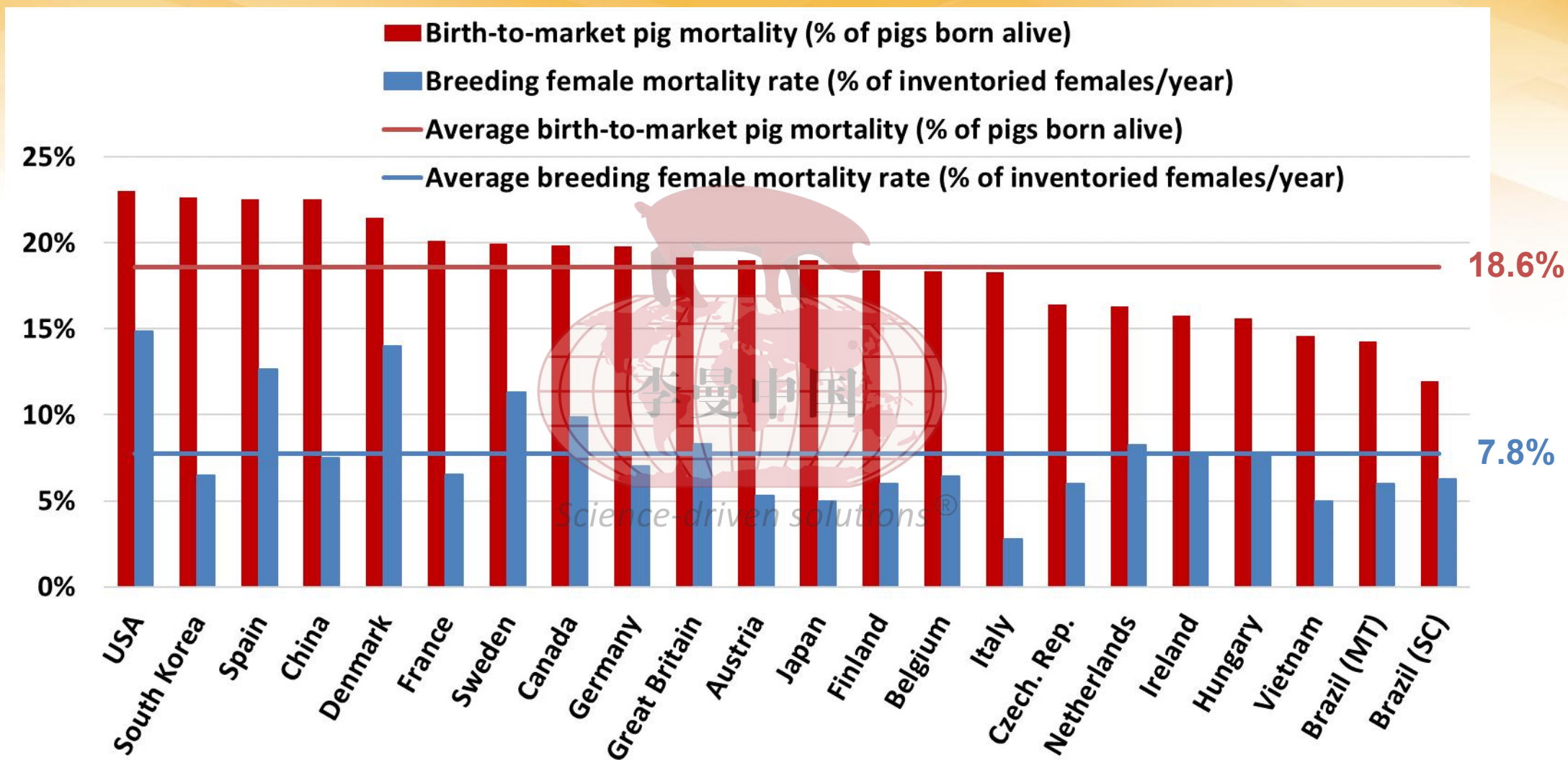
Breed-to-market, 2021



Whole herd feed conversion, 2021



Pig (birth-to-market) and sow mortality, 2021



Outline

- Data and model
- Analysis
 - Benchmarking cost of production, profitability, productivity, and prices
 - Year-over-year comparisons
 - Factors that give countries a competitive advantage or disadvantage
 - Marginal economic values



Cost of production US\$/kg carcass

Year-over-year changes (2021 vs. 2020)

	Country	2021	2020	Rank in 2021 (Rank in 2020)	Change from prior year
Americas	Brazil (MT)	\$1.36	\$1.15	1 (1)	\$0.21
	Brazil (SC)	\$1.50	\$1.20	2 (2)	\$0.31
	USA	\$1.56	\$1.21	3 (3)	\$0.35
	Denmark	\$1.71	\$1.55	4 (5)	\$0.15
	Canada	\$1.81	\$1.23	5 (4)	\$0.57
Europe	Hungary	\$1.82	\$1.58	6 (6)	\$0.24
	Belgium	\$1.85	\$1.63	7 (8)	\$0.22
	France	\$1.86	\$1.66	8 (9)	\$0.20
	Spain	\$1.87	\$1.61	9 (7)	\$0.27
	Netherlands	\$1.96	\$1.77	10 (11)	\$0.19
	Finland	\$1.97	\$1.72	11 (10)	\$0.26
	Czech. Rep.	\$1.99	\$1.87	12 (15)	\$0.12
	Austria	\$2.07	\$1.94	13 (16)	\$0.12
	Germany	\$2.10	\$1.80	14 (12)	\$0.30
	Ireland	\$2.17	\$1.97	15 (17)	\$0.20
	Sweden	\$2.24	\$1.83	16 (13)	\$0.41
	Great Britain	\$2.39	\$1.86	17 (14)	\$0.54
Asia	Italy	\$2.53	\$2.15	18 (18)	\$0.37
	Vietnam	\$2.99	\$2.62	19 (19)	\$0.37
	China	\$3.82	\$2.66	20 (20)	\$1.16
	South Korea	\$4.13	\$3.44	21 (21)	\$0.69
	Japan	\$4.72	\$3.97	22 (22)	\$0.74
Average		\$2.29	\$1.93		\$0.36

Year-over-year comparisons of key indicators, 2021 vs. 2020

Country	Total carcass weight of pork marketed (kg/female/year)	Average live weight marketed (kg/pig)	Number of pigs marketed (pigs/female/year)	\$ /kg carcass weight			
				Net profit	Market pig price	Total cost	Total feed cost
China	-195.52	-5.00	-1.46	-4.10	-2.94	1.16	0.82
Vietnam	185.70	0.00	2.06	-1.44	-1.07	0.37	0.36
South Korea	17.01	1.60	0.22	-1.09	-0.40	0.69	0.44
Japan	-2.60	-1.80	0.06	-1.00	-0.26	0.74	0.42
Great Britain	93.22	4.05	0.14	-0.56	-0.03	0.54	0.45
Germany	27.11	3.00	0.40	-0.50	-0.20	0.30	0.25
Hungary	-263.58	-7.18	0.97	-0.43	-0.19	0.24	0.16
Denmark	-5.54	0.00	0.06	-0.38	-0.23	0.15	0.13
Belgium	-47.35	1.04	0.08	-0.34	-0.12	0.22	0.22
Spain	-37.28	0.10	0.44	-0.31	-0.04	0.27	0.19
Ireland	104.08	3.10	0.37	-0.29	-0.09	0.20	0.15
Netherlands	127.65	0.10	1.20	-0.29	-0.10	0.19	0.17
Finland	-29.55	-0.81	0.13	-0.27	-0.02	0.26	0.19
Czech. Rep.	26.45	-0.73	0.46	-0.26	-0.14	0.12	0.12
Sweden	35.39	1.62	0.03	-0.21	0.20	0.41	0.29
France	-7.08	-0.42	0.02	-0.20	0.00	0.20	0.17
Austria	17.98	-0.10	0.20	-0.19	-0.06	0.12	0.17
Brazil (MT)	97.15	5.00	0.07	-0.18	0.03	0.21	0.20
Italy	93.44	0.52	0.60	-0.13	0.25	0.37	0.32
Brazil (SC)	125.20	3.20	0.80	-0.13	0.18	0.31	0.30
Canada	-124.61	0.00	0.00	0.14	0.71	0.57	0.47
USA	36.18	0.22	0.31	0.31	0.66	0.35	0.34
Average	12.43	0.34	0.12	-\$0.54	-\$0.17	\$0.36	\$0.29

Outline

- Data and model
- Analysis
 - Benchmarking cost of production, profitability, productivity, and prices
 - Year-over-year comparisons
 - Factors that give countries a competitive advantage or disadvantage
 - Marginal economic values



Relative profitability of countries in 2021 (US\$/kg carcass)

Country	Profit advantage over average (\$/kg carcass wt sold)
Vietnam	\$0.58
USA	\$0.54
China	\$0.49
South Korea	\$0.40
Brazil (SC)	\$0.20
Canada	\$0.19
Denmark	\$0.16
Spain	\$0.12
Sweden	\$0.12
Brazil (MT)	\$0.10
France	-\$0.02
Finland	-\$0.04
Austria	-\$0.05
Hungary	-\$0.15
Belgium	-\$0.20
Ireland	-\$0.20
Italy	-\$0.26
Netherlands	-\$0.27
Czech. Rep.	-\$0.33
Great Britain	-\$0.38
Germany	-\$0.43
Japan	-\$0.57

In 2021 producers in China were at a US\$0.49 **advantage** to a country with average profitability

Producers in Japan were at a US\$0.57 **disadvantage** to a country with average profitability and a US\$1.06 **disadvantage** to China

Factors that gave producers in each country a competitive advantage or disadvantage (US\$/kg carcass)

Country	Profit advantage over average (\$/kg carcass wt sold)	Market pig					Labor Usage and Wage	
		prices	Feed prices	Productivity	Fixed costs	Labor usage	Wage rates	Rates
Vietnam	\$0.58	\$1.46	-\$0.81	-\$0.01	\$0.04	-\$0.81	\$0.21	\$0.07
USA	\$0.54	-\$0.01	\$0.24	-\$0.12	\$0.10	\$0.09	\$0.02	\$0.07
China	\$0.49	\$2.19	-\$0.85	-\$0.88	\$0.04	-\$0.17	\$0.16	\$0.04
South Korea	\$0.40	\$2.41	-\$0.33	-\$0.60	-\$0.64	-\$0.04	-\$0.04	-\$0.11
Brazil (SC)	\$0.20	-\$0.41	-\$0.05	\$0.20	\$0.15	-\$0.10	\$0.20	\$0.11
Canada	\$0.19	-\$0.12	\$0.16	-\$0.09	\$0.16	\$0.01	\$0.02	-\$0.01
Denmark	\$0.16	-\$0.24	\$0.25	\$0.31	\$0.03	\$0.08	-\$0.15	-\$0.02
Spain	\$0.12	-\$0.12	\$0.00	-\$0.07	\$0.08	\$0.09	-\$0.01	\$0.05
Sweden	\$0.12	\$0.25	\$0.11	\$0.10	-\$0.20	\$0.07	-\$0.19	-\$0.06
Brazil (MT)	\$0.10	-\$0.66	\$0.20	\$0.21	\$0.15	-\$0.02	\$0.19	\$0.12
France	-\$0.02	-\$0.28	\$0.16	\$0.12	\$0.01	\$0.08	-\$0.09	\$0.02
Finland	-\$0.04	-\$0.18	\$0.43	\$0.21	-\$0.09	\$0.03	-\$0.07	-\$0.05
Austria	-\$0.05	-\$0.10	\$0.17	\$0.05	-\$0.22	\$0.02	-\$0.05	-\$0.05
Hungary	-\$0.15	-\$0.44	\$0.25	-\$0.11	-\$0.02	-\$0.17	\$0.15	\$0.03
Belgium	-\$0.20	-\$0.46	\$0.02	\$0.15	-\$0.01	\$0.07	-\$0.04	\$0.02
Ireland	-\$0.20	-\$0.14	-\$0.06	\$0.29	-\$0.02	\$0.03	-\$0.01	-\$0.01
Italy	-\$0.26	\$0.15	-\$0.06	-\$0.33	-\$0.13	-\$0.08	\$0.00	-\$0.11
Netherlands	-\$0.27	-\$0.43	\$0.05	\$0.28	\$0.00	\$0.10	-\$0.18	-\$0.01
Czech. Rep.	-\$0.33	-\$0.46	\$0.20	\$0.29	\$0.05	-\$0.11	\$0.10	-\$0.02
Great Britain	-\$0.38	-\$0.10	-\$0.28	\$0.11	\$0.03	\$0.03	-\$0.02	-\$0.01
Germany	-\$0.43	-\$0.44	\$0.08	\$0.14	-\$0.14	\$0.05	-\$0.08	-\$0.03
Japan	-\$0.57	\$2.03	-\$1.02	-\$0.85	\$0.02	-\$0.09	\$0.04	-\$0.07

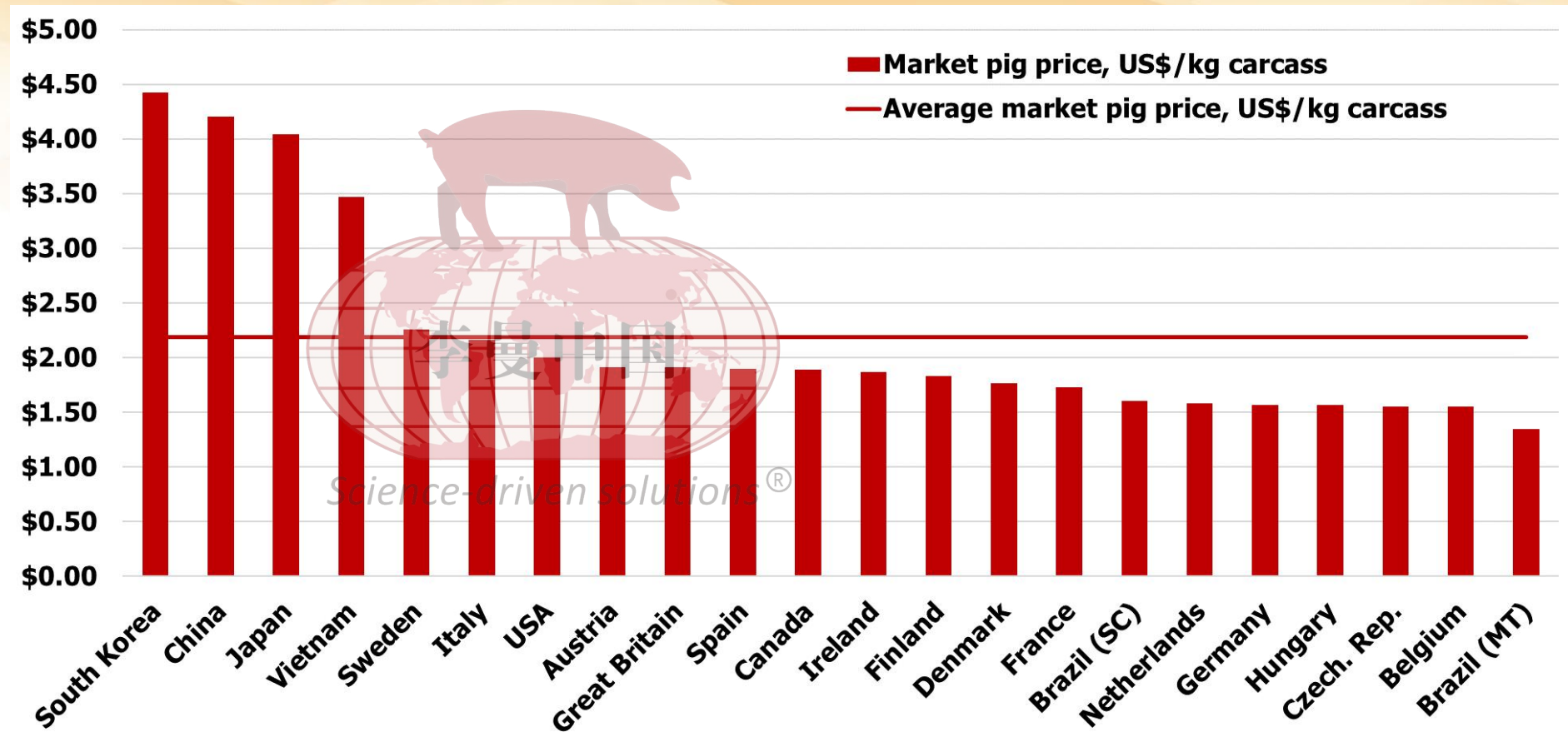
Factors that gave producers in each country a competitive advantage or disadvantage (US\$/kg carcass)

Country	Profit advantage over average (\$/kg carcass wt sold)	Market pig			Labor Usage and Wage			
		prices	Feed prices	Productivity	Fixed costs	Labor usage	Wage rates	Rates
Vietnam	\$0.58	\$1.46	-\$0.81	-\$0.01	\$0.04	-\$0.81	\$0.21	\$0.07
USA	\$0.54	-\$0.01	\$0.24	-\$0.12	\$0.10	\$0.09	\$0.02	\$0.07
China	\$0.49	\$2.19	-\$0.85	-\$0.88	\$0.04	-\$0.17	\$0.16	\$0.04
South Korea	\$0.40	\$2.41	-\$0.33	-\$0.60	-\$0.64	-\$0.04	-\$0.04	-\$0.11
Brazil (SC)	\$0.20	-\$0.41	-\$0.05	\$0.20	\$0.15	-\$0.10	\$0.20	\$0.11
Canada	\$0.19	-\$0.12	\$0.16	-\$0.09	\$0.16	\$0.01	\$0.02	-\$0.01
Denmark	\$0.16	-\$0.24	\$0.25	\$0.31	\$0.03	\$0.08	-\$0.15	-\$0.02
Spain	\$0.12	-\$0.12	\$0.00	-\$0.07	\$0.08	\$0.09	-\$0.01	\$0.05
Sweden	\$0.12	\$0.25	\$0.11	\$0.10	-\$0.20	\$0.07	-\$0.19	-\$0.06
Brazil (MT)	\$0.10	-\$0.66	\$0.20	\$0.21	\$0.15	-\$0.02	\$0.19	\$0.12
France	-\$0.02	-\$0.28	\$0.16	\$0.12	\$0.01	\$0.08	-\$0.09	\$0.02
Finland	-\$0.04	-\$0.18	\$0.43	\$0.21	-\$0.09	\$0.03	-\$0.07	-\$0.05
Austria	-\$0.05	-\$0.10	\$0.17	\$0.05	-\$0.22	\$0.02	-\$0.05	-\$0.05
Hungary	-\$0.15	-\$0.44	\$0.25	-\$0.11	-\$0.02	-\$0.17	\$0.15	\$0.03
Belgium	-\$0.20	-\$0.46	\$0.02	\$0.15	-\$0.01	\$0.07	-\$0.04	\$0.02
Ireland	-\$0.20	-\$0.14	-\$0.06	\$0.29	-\$0.02	\$0.03	-\$0.01	-\$0.01
Italy	-\$0.26	\$0.15	-\$0.06	-\$0.33	-\$0.13	-\$0.08	\$0.00	-\$0.11
Netherlands	-\$0.27	-\$0.43	\$0.05	\$0.28	\$0.00	\$0.10	-\$0.18	-\$0.01
Czech. Rep.	-\$0.33	-\$0.46	\$0.20	\$0.29	\$0.05	-\$0.11	\$0.10	-\$0.02
Great Britain	-\$0.38	-\$0.10	-\$0.28	\$0.11	\$0.03	\$0.03	-\$0.02	-\$0.01
Germany	-\$0.43	-\$0.44	\$0.08	\$0.14	-\$0.14	\$0.05	-\$0.08	-\$0.03
Japan	-\$0.57	\$2.03	-\$1.02	-\$0.85	\$0.02	-\$0.09	\$0.04	-\$0.07

Producers in Asia benefited from higher market pig prices in 2021



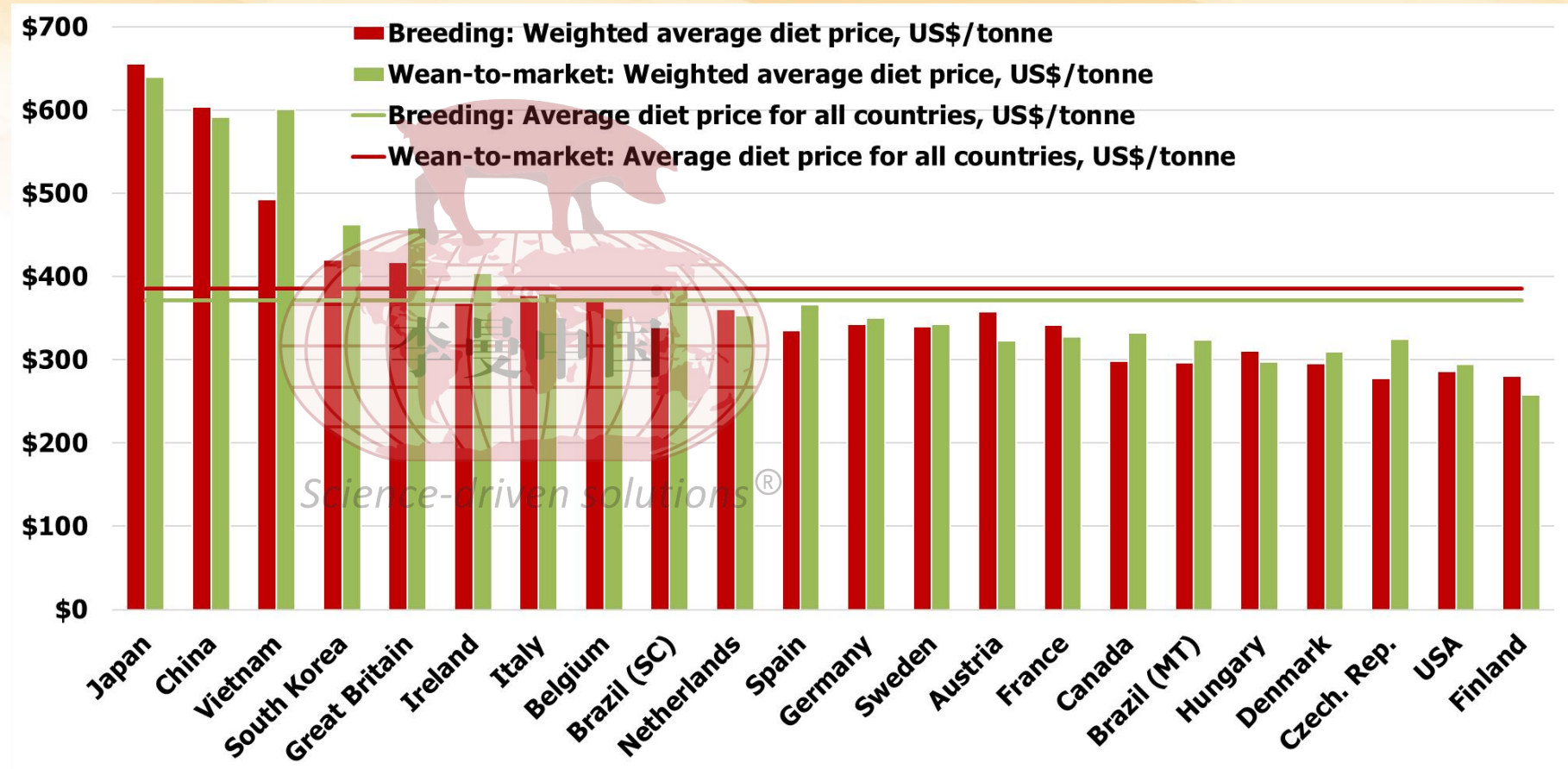
Country	Market pig prices
South Korea	\$2.41
China	\$2.19
Japan	\$2.03
Vietnam	\$1.46
Sweden	\$0.25
Italy	\$0.15
USA	-\$0.01
Austria	-\$0.10
Great Britain	-\$0.10
Spain	-\$0.12
Canada	-\$0.12
Ireland	-\$0.14
Finland	-\$0.18
Denmark	-\$0.24
France	-\$0.28
Brazil (SC)	-\$0.41
Netherlands	-\$0.43
Germany	-\$0.44
Hungary	-\$0.44
Czech. Rep.	-\$0.46
Belgium	-\$0.46
Brazil (MT)	-\$0.66



Producers in Asia were disadvantaged by high feed prices in 2021



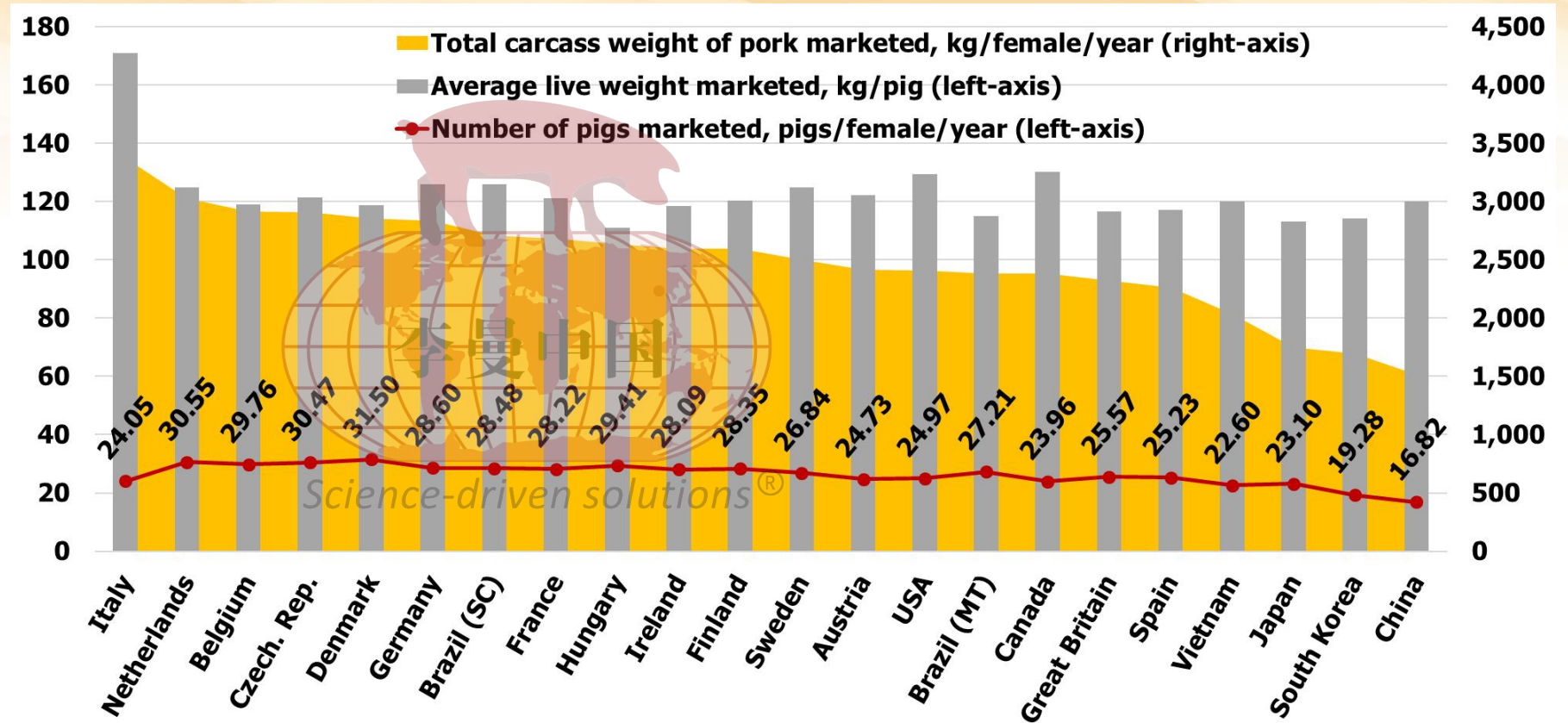
Country	Feed prices
Finland	\$0.43
Denmark	\$0.25
Hungary	\$0.25
USA	\$0.24
Czech. Rep.	\$0.20
Brazil (MT)	\$0.20
Austria	\$0.17
France	\$0.16
Canada	\$0.16
Sweden	\$0.11
Germany	\$0.08
Netherlands	\$0.05
Belgium	\$0.02
Spain	\$0.00
Brazil (SC)	-\$0.05
Italy	-\$0.06
Ireland	-\$0.06
Great Britain	-\$0.28
South Korea	-\$0.33
Vietnam	-\$0.81
China	-\$0.85
Japan	-\$1.02



Producers in Europe benefit from high productivity



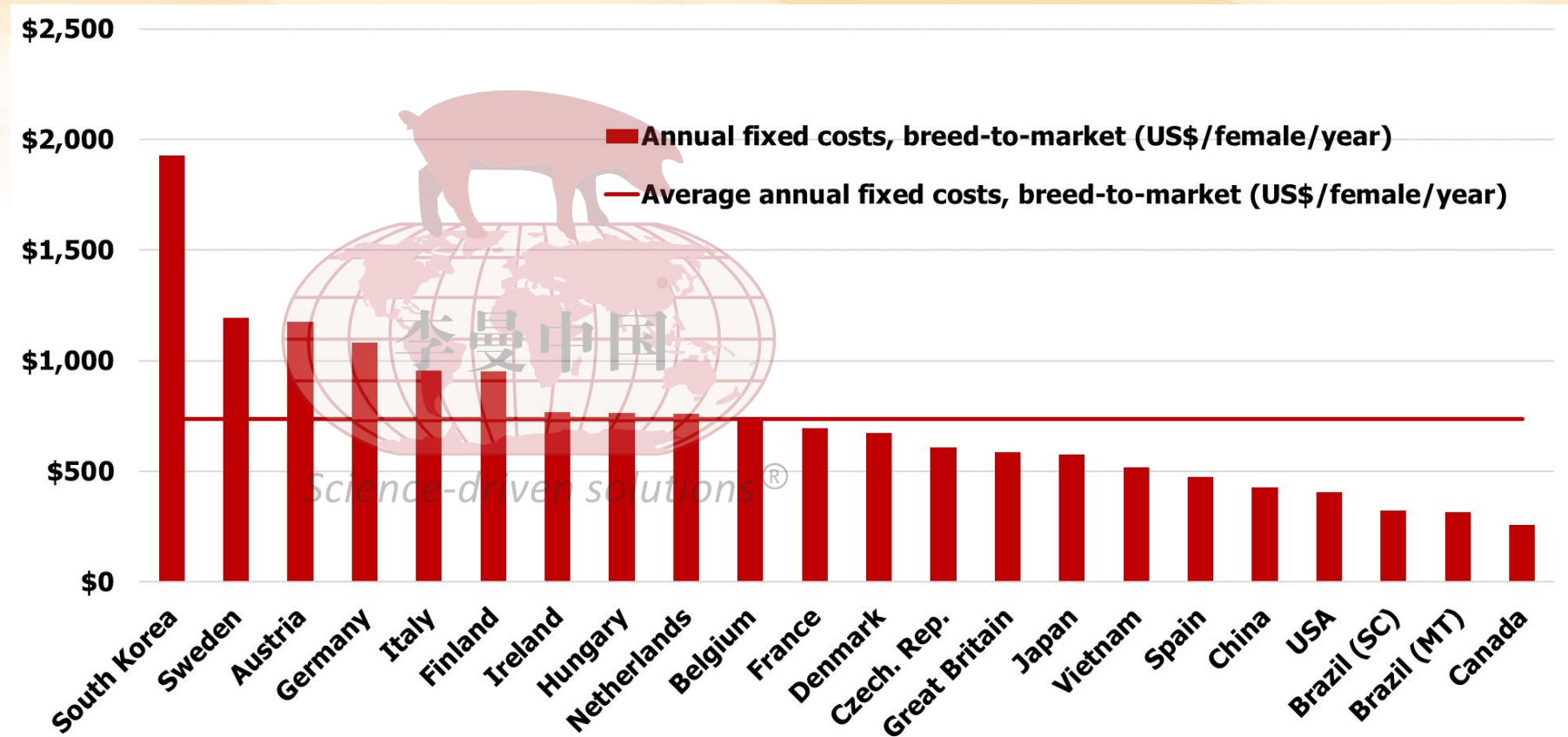
Country	Productivity
Denmark	\$0.31
Ireland	\$0.29
Czech. Rep.	\$0.29
Netherlands	\$0.28
Finland	\$0.21
Brazil (MT)	\$0.21
Brazil (SC)	\$0.20
Belgium	\$0.15
Germany	\$0.14
France	\$0.12
Great Britain	\$0.11
Sweden	\$0.10
Austria	\$0.05
Vietnam	-\$0.01
Spain	-\$0.07
Canada	-\$0.09
Hungary	-\$0.11
USA	-\$0.12
Italy	-\$0.33
South Korea	-\$0.60
Japan	-\$0.85
China	-\$0.88



Producers in the Americas benefit from low fixed costs



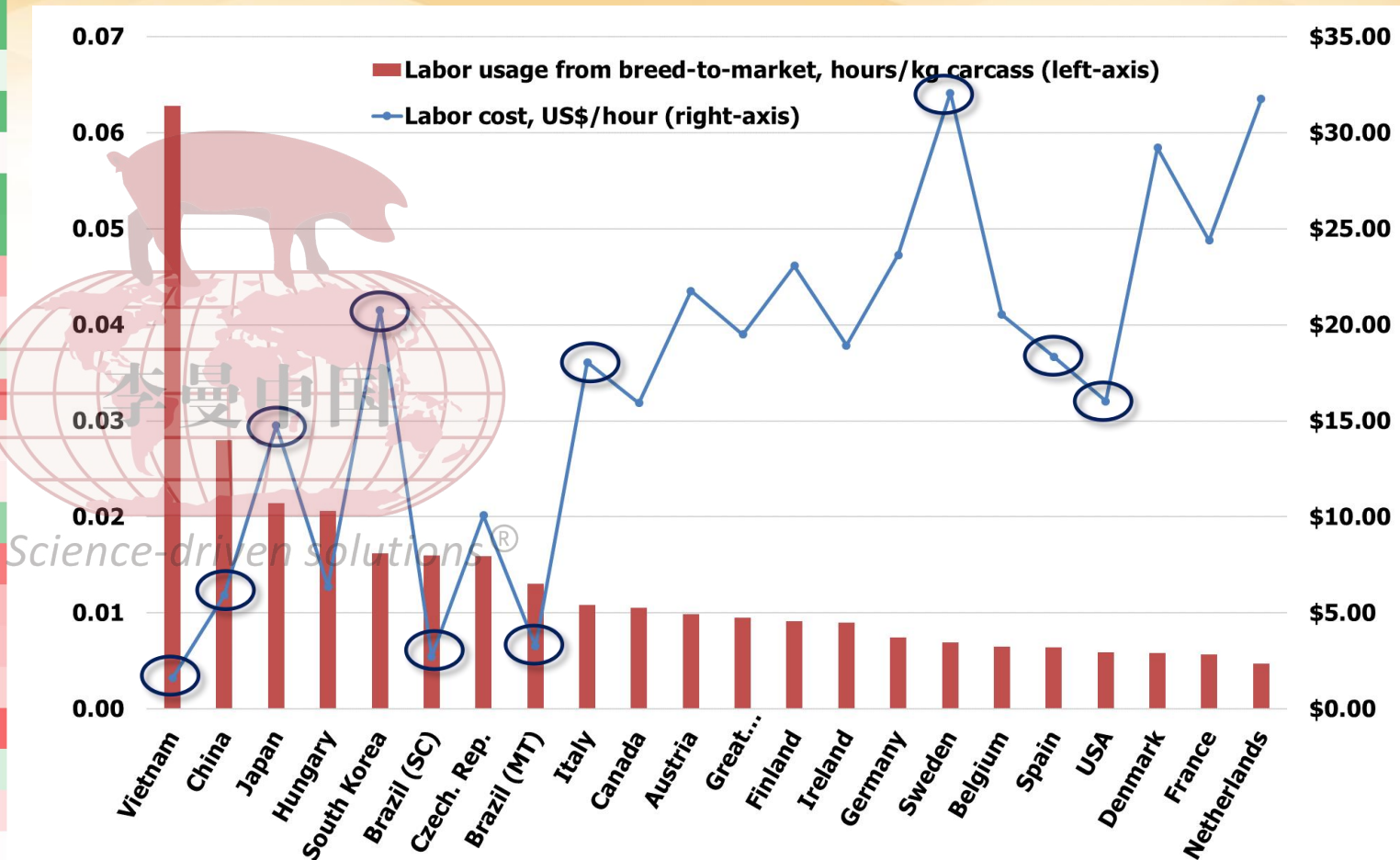
Country	Fixed costs
Canada	\$0.16
Brazil (MT)	\$0.15
Brazil (SC)	\$0.15
USA	\$0.10
Spain	\$0.08
Czech. Rep.	\$0.05
Vietnam	\$0.04
China	\$0.04
Great Britain	\$0.03
Denmark	\$0.03
Japan	\$0.02
France	\$0.01
Netherlands	\$0.00
Belgium	-\$0.01
Hungary	-\$0.02
Ireland	-\$0.02
Finland	-\$0.09
Italy	-\$0.13
Germany	-\$0.14
Sweden	-\$0.20
Austria	-\$0.22
South Korea	-\$0.64



Producers in Brazil, the USA, Vietnam and Spain benefit from low labor costs



Country	Labor costs	Labor usage	Wage rates
Brazil (MT)	\$0.12	-\$0.02	\$0.19
Brazil (SC)	\$0.11	-\$0.10	\$0.20
USA	\$0.07	\$0.09	\$0.02
Vietnam	\$0.07	-\$0.81	\$0.21
Spain	\$0.05	\$0.09	-\$0.01
China	\$0.04	-\$0.17	\$0.16
Hungary	\$0.03	-\$0.17	\$0.15
France	\$0.02	\$0.08	-\$0.09
Belgium	\$0.02	\$0.07	-\$0.04
Canada	-\$0.01	\$0.01	\$0.02
Netherlands	-\$0.01	\$0.10	-\$0.18
Ireland	-\$0.01	\$0.03	-\$0.01
Great Britain	-\$0.01	\$0.03	-\$0.02
Czech. Rep.	-\$0.02	-\$0.11	\$0.10
Denmark	-\$0.02	\$0.08	-\$0.15
Germany	-\$0.03	\$0.05	-\$0.08
Finland	-\$0.05	\$0.03	-\$0.07
Austria	-\$0.05	\$0.02	-\$0.05
Sweden	-\$0.06	\$0.07	-\$0.19
Japan	-\$0.07	-\$0.09	\$0.04
South Korea	-\$0.11	-\$0.04	-\$0.04
Italy	-\$0.11	-\$0.08	\$0.00



Outline

- Data and model
- Analysis
 - Benchmarking cost of production, profitability, productivity, and prices
 - Year-over-year comparisons
 - Factors that give countries a competitive advantage or disadvantage
 - Marginal economic values



Marginal economic values

Increment	US\$/breeding female/year			US\$/pig placed		
	Litters farrowed / female / year	Pigs born alive / litter farrowed	Prewean mortality (% of pigs born alive)	Wean-to-market Mortality (% of pigs placed)	Wean-to-market Average daily gain (kg / day)	Wean-to-market Feed-to-gain ratio (kg of feed / kg of gain)
	0.05	0.25	-1.0%	-1.0%	0.01	-0.025
South Korea	\$62.23	\$56.65	\$29.23	\$1.95	\$2.89	\$1.12
China	\$56.57	\$48.52	\$25.27	\$2.00	\$2.51	\$1.58
Vietnam	\$38.89	\$38.89	\$19.30	\$1.36	\$1.65	\$1.63
USA	\$39.20	\$34.68	\$22.11			\$0.87
Sweden	\$37.21	\$27.35	\$19.30			\$0.97
Japan	\$12.59	\$11.01	\$6.41			\$1.62
Denmark	\$31.48	\$19.70	\$16.11			\$0.83
Canada	\$24.36	\$21.55	\$13.11			\$1.00
Austria	\$22.75	\$19.72	\$12.11			\$0.90
Spain	\$23.34	\$18.55	\$12.11			\$0.96
Finland	\$23.53	\$17.45	\$12.11			\$0.71
France	\$20.94	\$16.16	\$11.11			\$0.90
Brazil (SC)	\$19.68	\$16.66	\$10.11			\$1.13
Italy	\$4.32	\$3.68	\$2.11			\$1.50
Ireland	\$14.64	\$11.31	\$7.11			\$1.10
Brazil (MT)	\$14.41	\$13.29	\$7.71			\$0.87
Hungary	\$12.15	\$9.39	\$6.31			\$0.75
Belgium	\$9.80	\$7.55	\$5.31	\$0.52	\$0.54	\$0.97
Great Britain	\$5.69	\$4.39	\$2.87	\$0.55	\$0.42	\$1.20
Netherlands	\$3.46	\$2.61	\$1.85	\$0.40	\$0.58	\$1.01
Czech. Rep.	\$4.89	\$3.53	\$2.51	\$0.40	\$0.55	\$0.90
Germany	-\$1.60	-\$1.19	-\$0.87	\$0.35	\$0.47	\$1.01

In 2021, the marginal economic value of increasing PBA per litter by 0.25 was worth US\$48.52 in China.

The same 0.25 increase in PBA per litter was only worth US\$2.61 in the Netherlands.

Marginal economic values

Increment	US\$/breeding female/year				US\$/pig placed	
	Litters farrowed / female / year	Pigs born alive / litter farrowed	Prewean mortality (% of pigs born alive)	Wean-to-market Mortality (% of pigs placed)	Wean-to-market Average daily gain (kg / day)	Wean-to-market Feed-to-gain ratio (kg of feed / kg of gain)
	0.05	0.25	-1.0%	-1.0%	0.01	-0.025
South Korea	\$62.23	\$56.65	\$29.23	\$1.95	\$2.89	\$1.12
China	\$56.57	\$48.52	\$25.27	\$2.00	\$2.51	\$1.58
Vietnam	\$38.57	\$32.14	\$16.63	\$1.36	\$1.65	\$1.63
USA	\$39.23	\$32.77	\$16.89	\$1.10	\$1.06	\$0.87
Sweden	\$37.69	\$31.41	\$16.21	\$0.97	\$1.03	\$0.97
Japan	\$12.57	\$10.47	\$5.23	\$0.93	\$1.46	\$1.62
Denmark	\$31.57	\$26.31	\$13.16	\$0.74	\$0.76	\$0.83
Canada	\$24.69	\$20.57	\$10.28	\$0.87	\$0.80	\$1.00
Austria	\$22.57	\$18.81	\$9.41	\$0.77	\$1.00	\$0.90
Spain	\$23.57	\$19.64	\$9.82	\$0.77	\$0.89	\$0.96
Finland	\$23.57	\$19.64	\$9.82	\$0.63	\$1.01	\$0.71
France	\$20.57	\$17.14	\$8.57	\$0.68	\$0.79	\$0.90
Brazil (SC)	\$19.57	\$16.31	\$8.16	\$0.69	\$0.45	\$1.13
Italy	\$4.57	\$3.81	\$1.91	\$0.87	\$0.93	\$1.50
Ireland	\$14.57	\$12.14	\$6.07	\$0.61	\$0.66	\$1.10
Brazil (MT)	\$14.57	\$12.14	\$6.07	\$0.53	\$0.39	\$0.87
Hungary	\$12.57	\$10.47	\$5.23	\$0.49	\$0.66	\$0.75
Belgium	\$9.57	\$7.91	\$3.96	\$0.52	\$0.54	\$0.97
Great Britain	\$5.57	\$4.64	\$2.32	\$0.55	\$0.42	\$1.20
Netherlands	\$3.46	\$2.61	\$1.85	\$0.40	\$0.58	\$1.01
Czech. Rep.	\$4.89	\$3.53	\$2.51	\$0.40	\$0.55	\$0.90
Germany	-\$1.60	-\$1.19	-\$0.87	\$0.35	\$0.47	\$1.01

In 2021, the marginal economic value of reducing WTM mortality by 1% was worth US\$2.00 in China.

The same 1% reduction in WTM mortality was only worth US\$0.35 in Germany.

Summary (2021)

- If comparing pork producers based on profitability, as is done when evaluating companies, then Vietnam, China, South Korea, and the USA came out on top
- If using animal husbandry and productivity as a performance measure, then Denmark and the Netherlands ranked at the top
- If using production costs as a metric, Brazil and USA are the most competitive
- The source of competitiveness of producers in the USA is not just cheap feed
 - High labor productivity even though cost of labor per hour is below that of countries that use similar amounts of labor
 - Low fixed costs



Benchmarking the profitability of raising pigs 2021

Funded by MSD Animal Health (Merck Animal Health in the United States and Canada)

<https://www.msd-animal-health-swine.com/market-trends/benchmarking-the-profitability-of-raising-pigs-2021/>

Download PDF

2018

2019

2020

2021

