

An Overview of China's Emergence and East Asian Regional Trade to 2020

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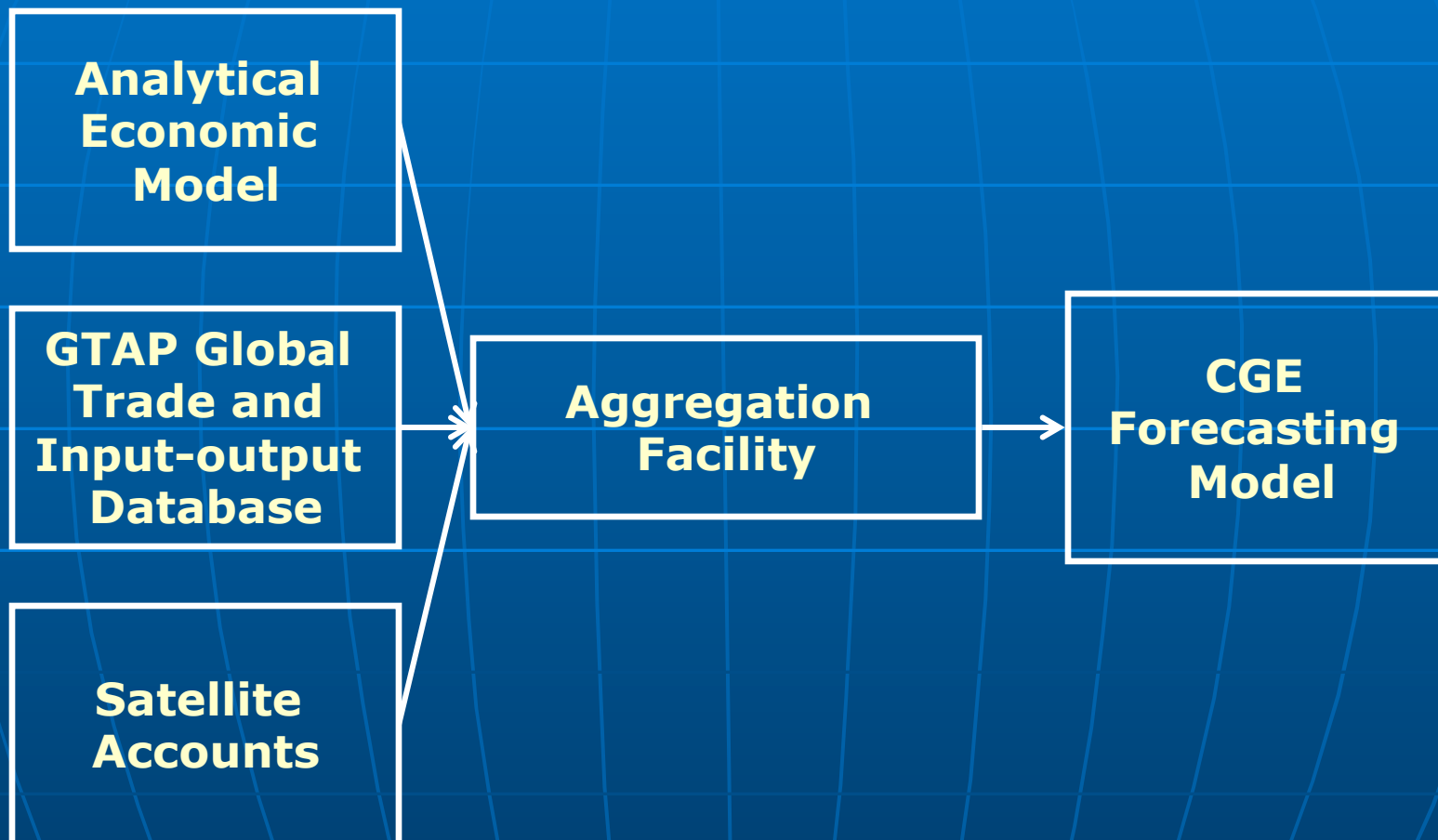
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Introduction

- China's accession to the WTO is a watershed event, for the global economy generally and for East Asia in particular.
- China has already established new standards for sustained growth and dynamic resource allocation by a large economy, and further Chinese domestic and external liberalization will redefine trade relations in ways that are only beginning to be understood.
- Initial reactions of regional partners, who perceive China as a strong export competitor and magnet for FDI, have been somewhat defensive.
- These sentiments could undermine multilateralism and retard the dramatic historical progress of regional trade and economic growth.
- Our research reveals a more complex picture of China's emergence, however, one that may present as many opportunities as threats to East Asian policy makers.

Methodology: The ADBI Global Model



Analytical Economic Model

- A GE growth model detailing real interactions between 18 countries/regions.
- Supply (18 sectors): firm-level production technology with Leontief intermediate use.
- Demand: domestic consumption functions by household and commodity type.
- Dynamic specification of factor growth and demographic transitions.
- Extensive accounting for transfer relationships between institutions (fiscal, capital flows, remittances, etc.).

The Global Trade Analysis Project (GTAP) Database

This dataset contains, for 66 countries/
regions and 57 sectors,

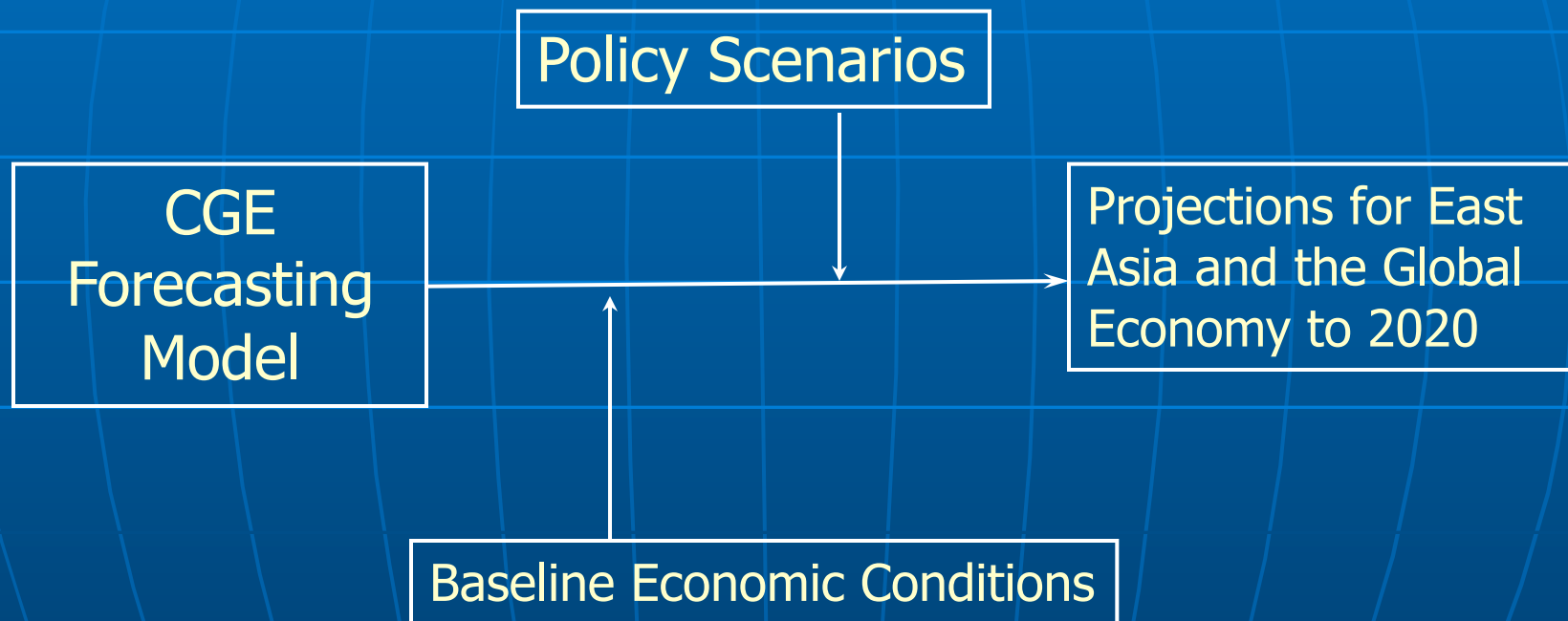
1. National income and product accounts
2. Social accounting matrices
3. Bilateral trade flow tables
4. Protection and support estimates

for more information, see www.gtap.org

Satellite Accounts

- Productivity trend estimates
- Structural parameters
- Demographic and resource data
- Monetary and financial data (future version)

Forward-looking Policy Analysis

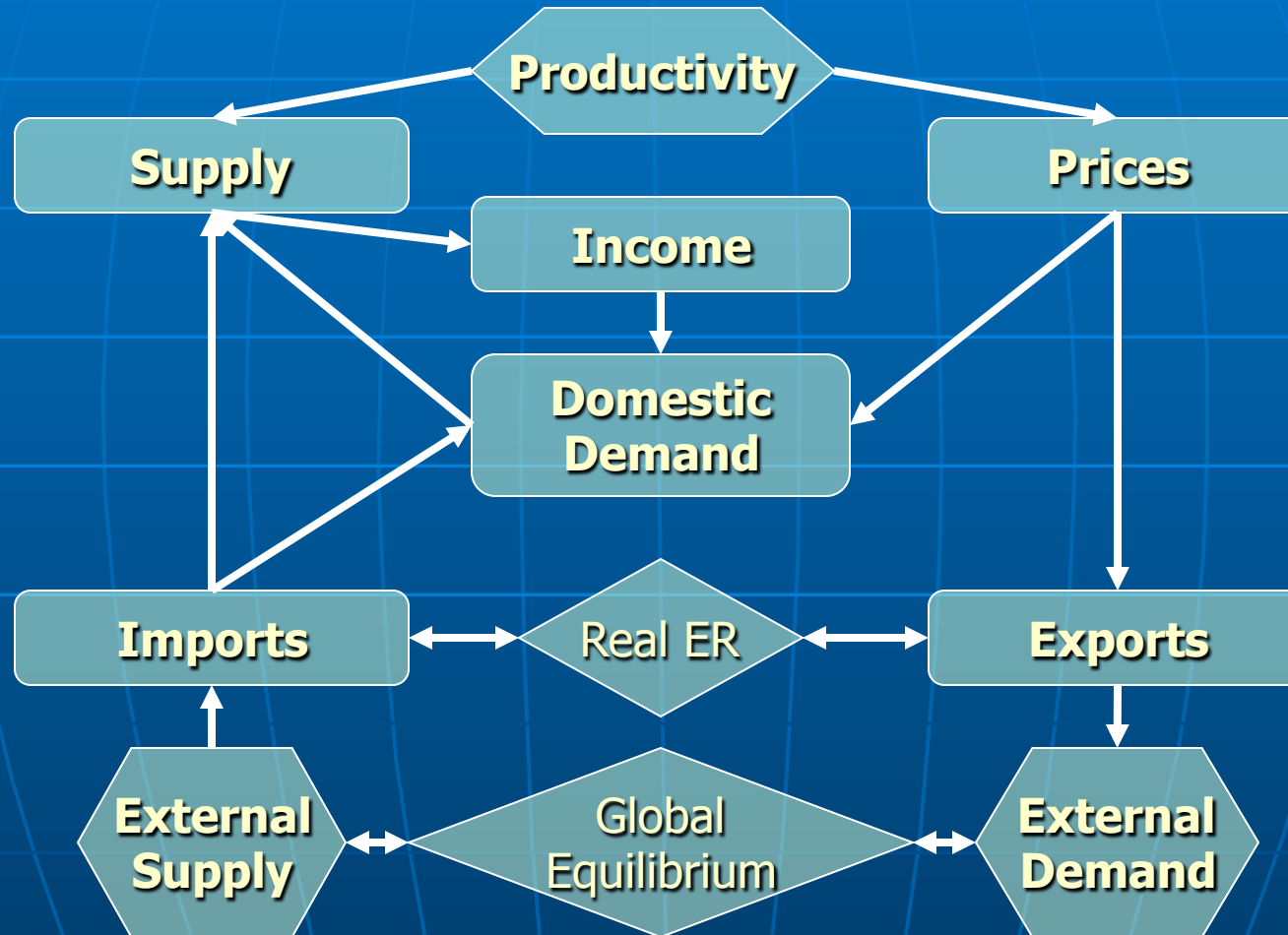


Baseline Projections to 2020

The model is calibrated to country and regional real GDP growth rates, obtained as consensus estimates from independent sources (DRI, IMF, Cambridge Econometrics).

Using exogenous rates of implied TFP growth, the model computes supply, demand, and trade patterns compatible with domestic and global equilibrium conditions.

The Mechanism



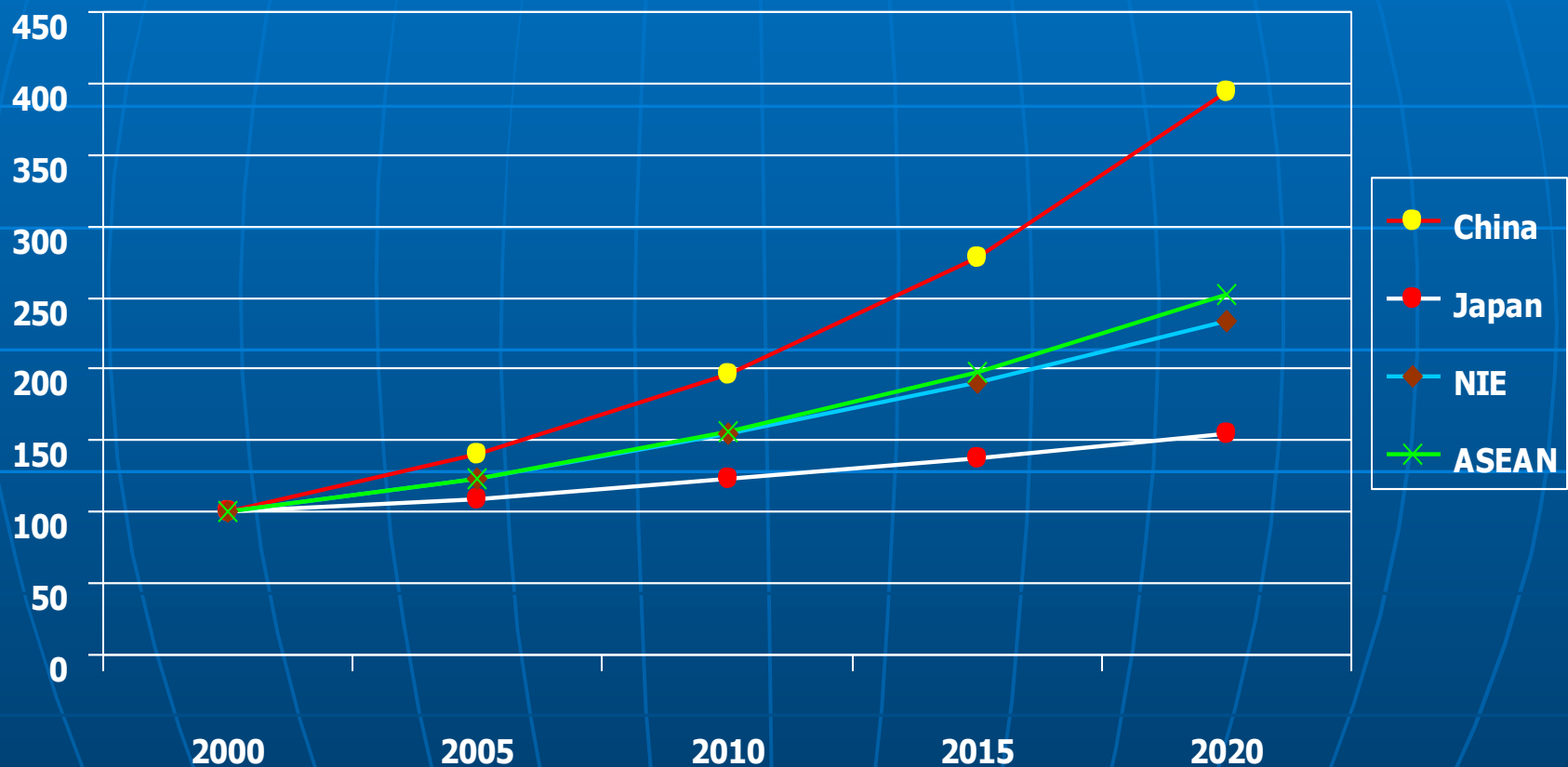
Selected Macroeconomic Indicators: Baseline Scenario

(percentage annualized growth, 2000-2020 unless otherwise indicated)

	Real GDP Absorption		Exports	Imports	Exp PI	Imp PI	Real ER
China	7.10	6.94	6.27	5.85	-.22	-.18	-.04
Japan	2.20	2.12	2.37	3.15	.22	-.13	.35
NIE	4.34	4.42	4.01	4.21	-.09	-.08	-.01
ASEAN	4.75	4.55	4.46	4.25	-.26	-.13	-.13
USA	2.62	2.61	3.07	2.94	.12	-.09	.21
EU	2.52	2.63	2.37	2.60	.13	.01	.13
ROW	3.65	3.65	3.69	3.40	-.19	-.09	-.11

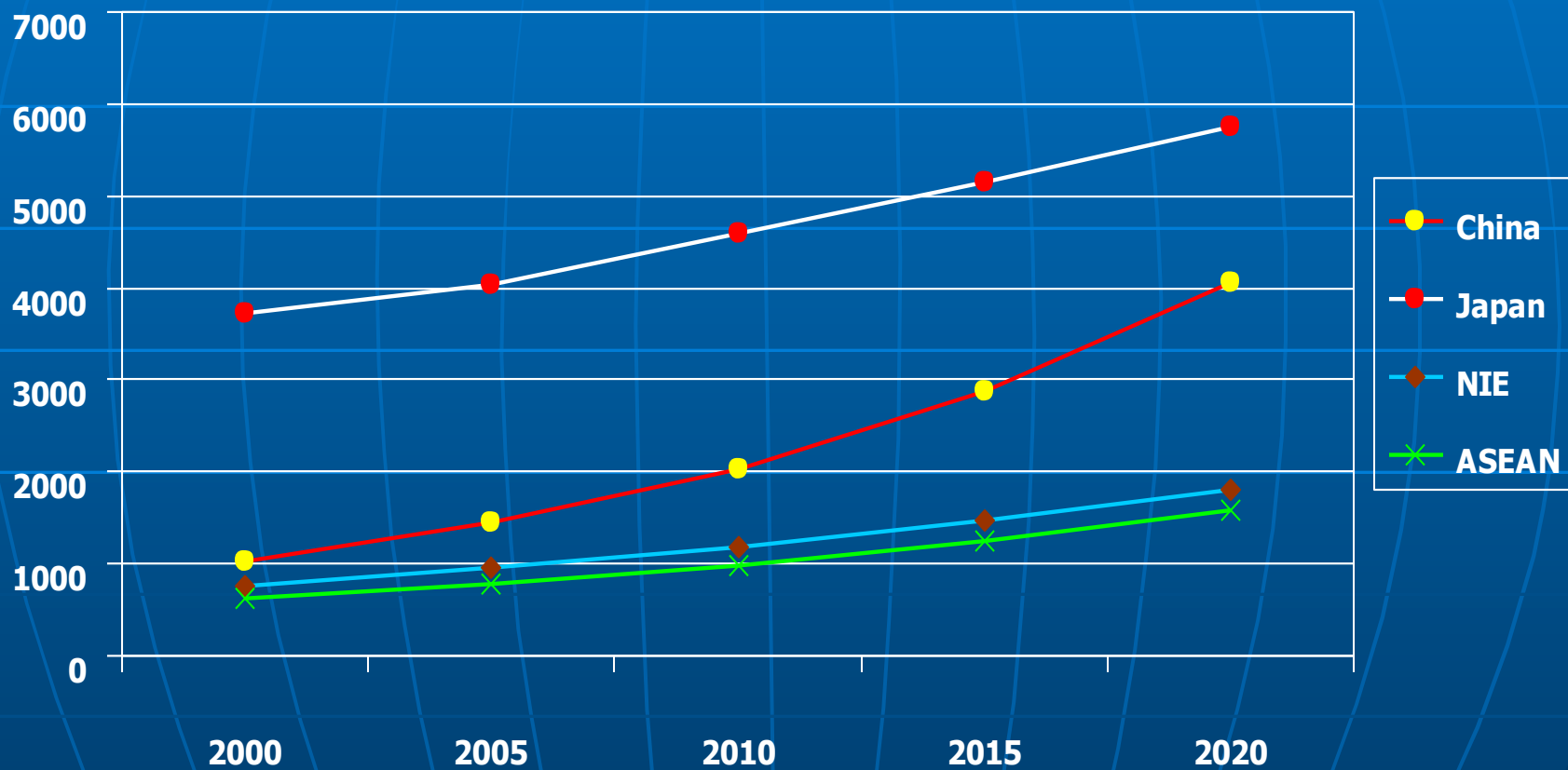
Real GDP Growth

(Normalized to 100 in 2000)



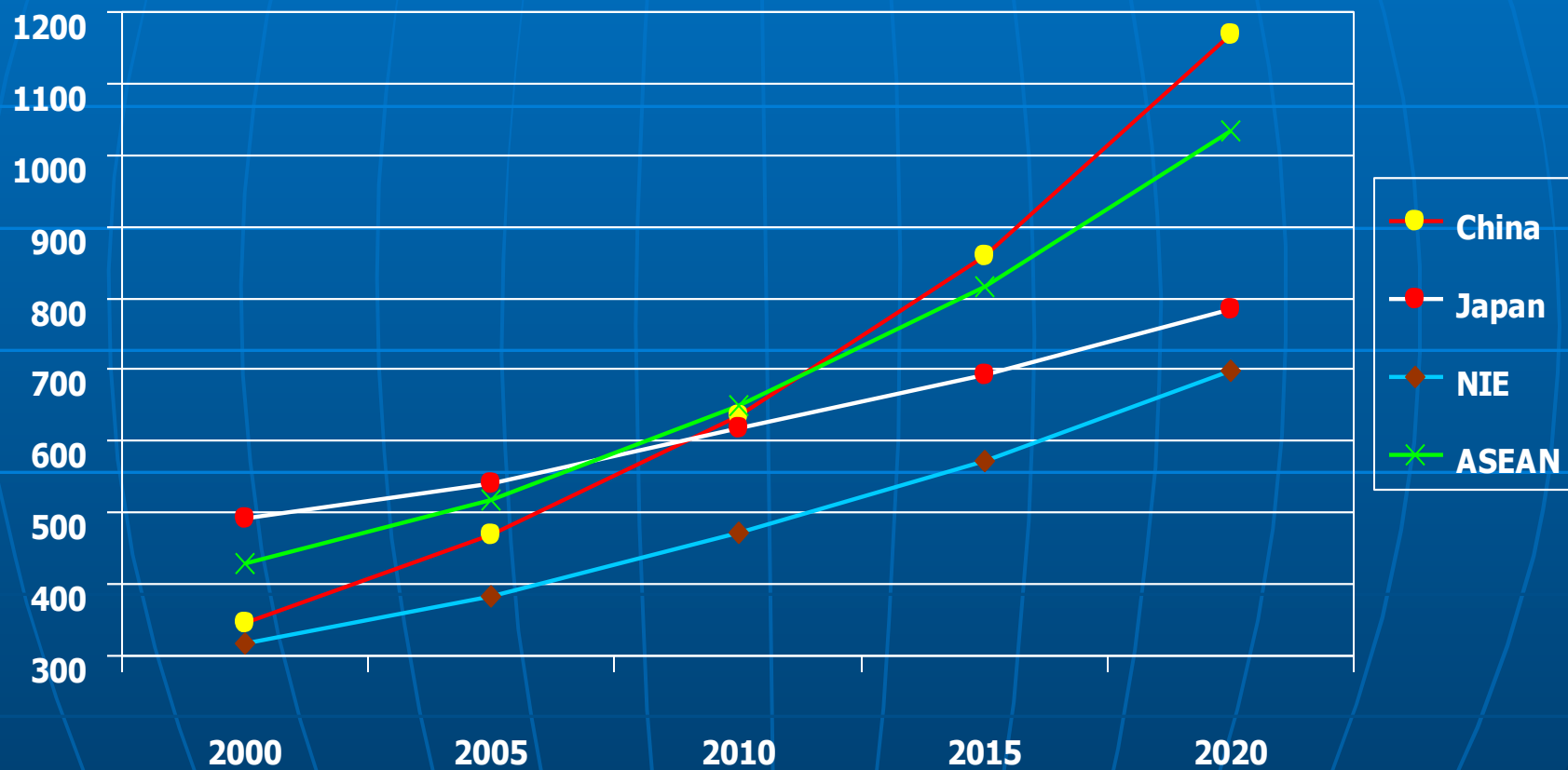
Real GDP

(billions of 2000 USD)



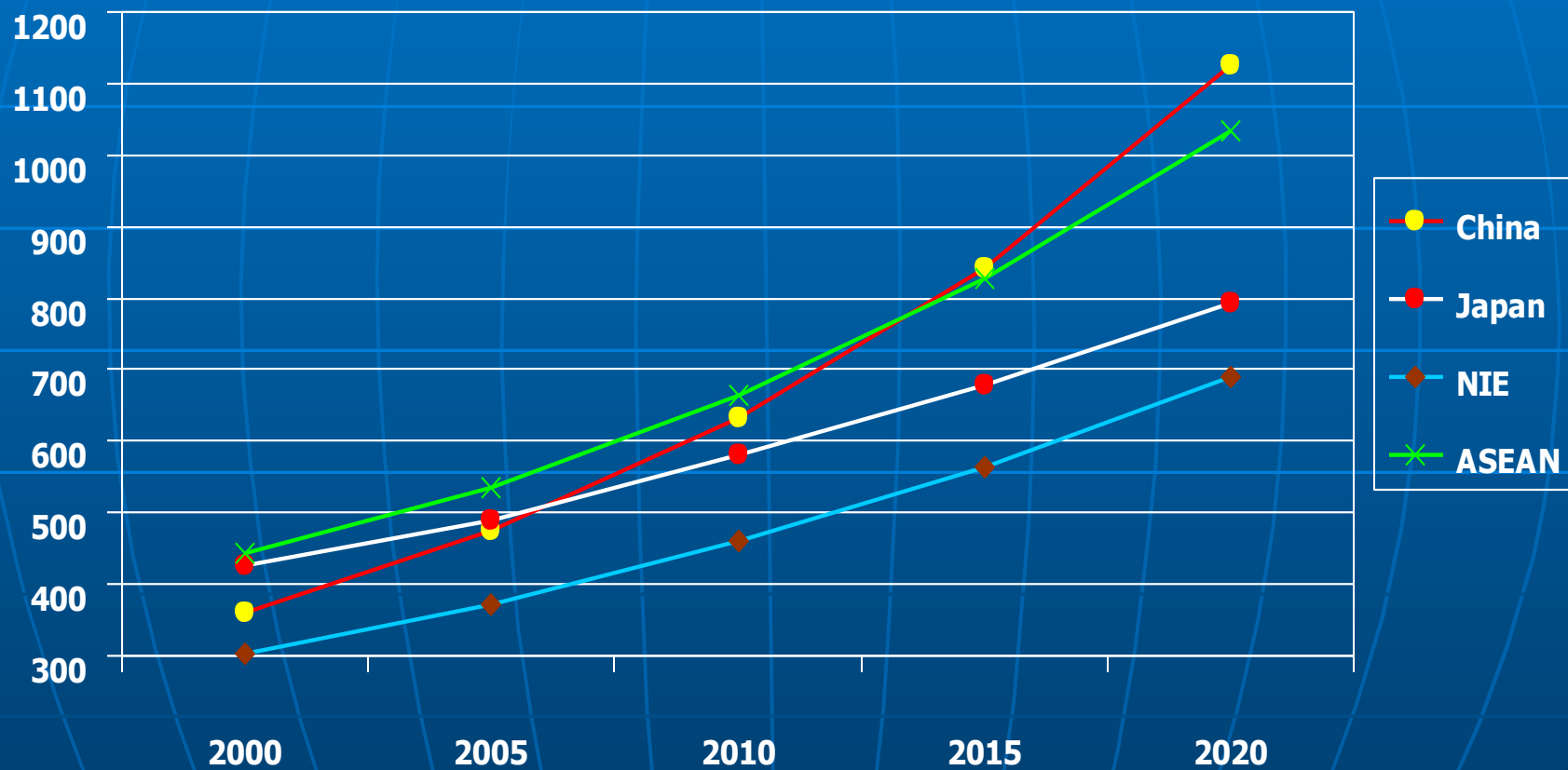
Real Exports

(billions of 2000 USD)



Real Imports

(billions of 2000 USD)



Bilateral Trade Growth: Baseline Scenario

(percentage annualized growth rates, 2000-2020)

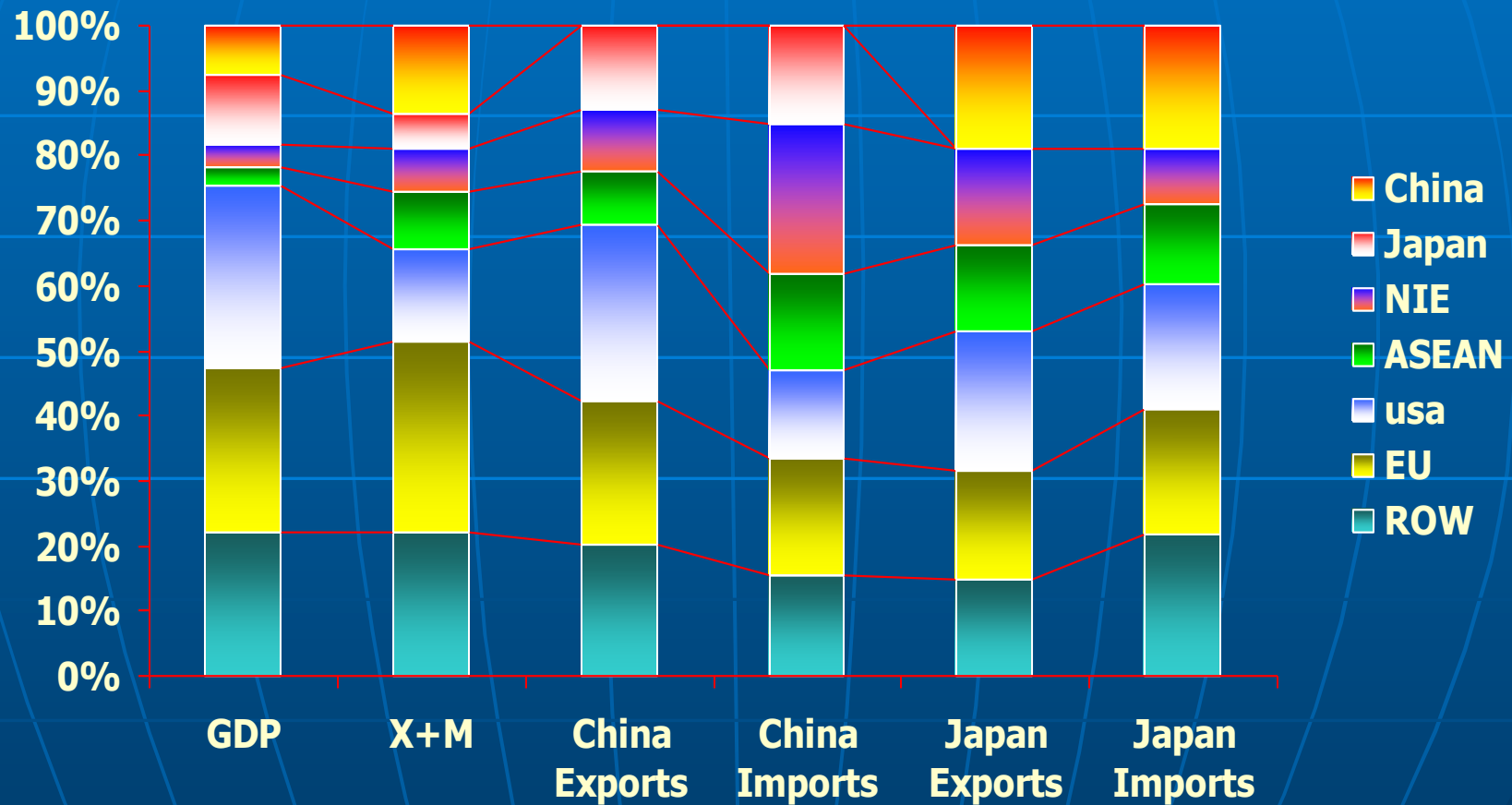
<u>Exporter</u>	<u>Importer</u>				USA	EU	ROW	Total
	China	Japan	NIE	ASEAN				
China	.0	5.5	7.6	7.1	6.2	6.3	6.4	6.4
Japan	4.7	.0	2.8	2.6	1.4	1.5	2.0	2.4
NIE	6.2	3.9	4.3	4.3	2.3	2.6	3.4	4.0
ASEAN	7.4	3.6	4.7	5.2	2.9	3.6	5.0	4.5
USA	5.7	2.3	4.2	3.7	.0	2.6	2.9	3.1
EU	5.0	2.1	3.8	3.6	2.2	2.0	2.6	2.4
ROW	6.3	2.8	3.9	4.6	2.8	3.5	3.8	3.5
Total	5.8	3.1	4.2	4.3	2.9	2.6	3.3	3.2

Bilateral Trade Balances: Baseline Scenario

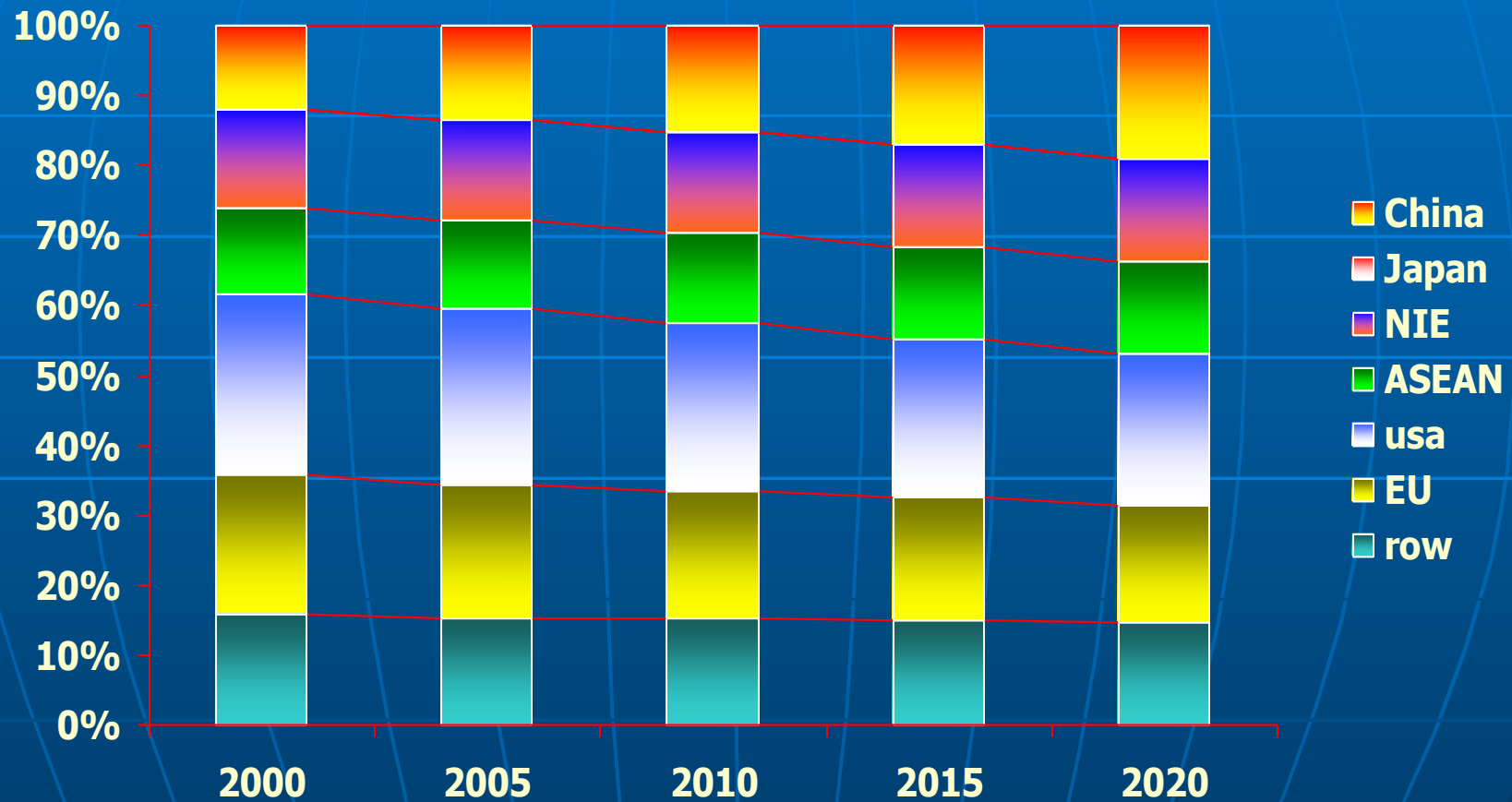
(Year 2020 in Billions of 2000 USD)

<u>Exporter</u>	<u>Importer</u>				USA	EU	ROW	Total
	China	Japan	NIE	ASEAN				
China	0	-5	-135	-41	166	66	71	122
Japan	5	0	39	20	23	-15	-50	21
NIE	135	-39	0	19	-32	-32	-12	40
ASEAN	41	-20	-19	0	18	8	12	41
USA	-166	-23	32	-18	0	48	-40	-168
EU	-66	15	32	-8	-48	0	34	-41
ROW	-71	50	12	-12	40	-34	0	-16
Total	-122	-21	-40	-41	168	41	16	0

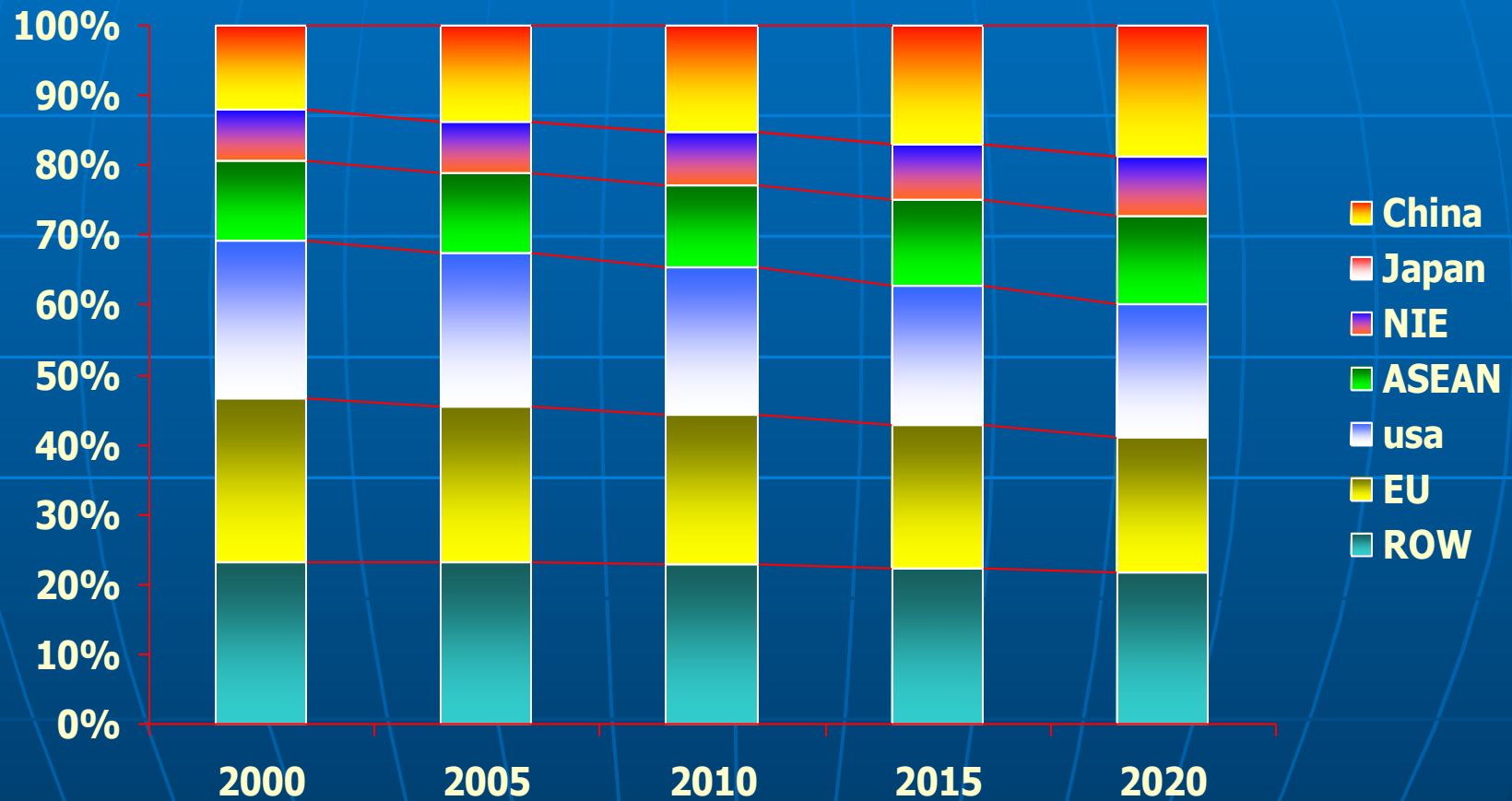
Selected GDP and Trade Shares (Baseline, 2020)



Japan: Export Shares by Destination (Baseline)



Japan: Import Shares by Origin (Baseline)



Scenarios

1. Baseline: Business as Usual – Consensus international forecasts for real GDP growth.
2. China WTO – China proceeds with WTO accession, ROW follows the Baseline
3. AFTAPC – AFTA Plus China
4. GTL – Global Tariff Liberalization

Bilateral, Trade Weighted Tariffs

Exporter	Importer																		
	chn	hkg	idn	jpn	kor	mys	phi	sgp	tha	tw	vn	anz	can	eur	lac	sas	usa	row	Total
China	chn	0	7	9	25	9	11	0	16	5	26	11	9	6	14	27	6	14	8
Hong Kong	hkg	18	0	6	9	6	3	0	8	5	46	0	12	5	4	15	4	2	6
Indonesia	idn	10	0	0	5	5	11	6	0	15	4	8	3	6	10	22	7	12	7
Japan	jpn	15	0	10	0	8	8	6	0	17	5	17	5	4	4	12	27	2	9
Korea	kor	16	0	19	6	0	3	6	0	13	5	18	6	3	4	13	25	3	12
Malaysia	mys	16	0	7	2	5	0	5	0	11	4	18	3	2	4	8	28	2	12
Philippines	phi	9	0	1	5	9	1	0	8	3	0	2	1	2	2	2	4	5	3
Singapore	sgp	11	0	4	1	6	5	4	0	11	4	15	1	0	2	6	21	1	7
Thailand	tha	19	0	8	13	8	7	3	0	0	4	24	4	4	6	7	23	5	9
Taiwan	tw	16	0	8	4	8	5	9	0	15	0	17	4	4	4	11	21	3	8
Vietnam	vn	6	0	0	11	10	22	21	0	8	8	0	1	10	10	10	0	9	12
Australia, New Zealand	anz	14	0	6	20	6	7	8	2	12	6	8	0	8	9	9	11	3	21
Canada	can	23	0	2	19	4	1	3	0	4	3	0	2	0	3	9	8	0	13
Western Europe	eur	11	0	4	4	6	4	3	0	10	7	11	3	4	1	9	19	2	11
Latin America and Car	lac	20	0	3	10	17	3	4	1	12	3	0	2	3	8	13	17	3	16
South Asia	sas	9	0	4	10	9	8	6	0	11	2	0	8	9	7	8	20	7	14
United States	usa	14	0	5	9	14	3	5	0	9	4	5	3	1	3	6	16	0	9
Rest of the World	row	5	0	3	2	5	4	1	0	4	3	9	2	2	4	5	25	2	8
Total	Total	14	0	7	7	9	5	5	6	11	5	16	4	2	9	21	2	10	5
Developing East Asia	eap	16	0	11	7	11	7	7	0	15	5	19	6	5	4	12	26	3	10
Dev. E. Asia ex China	eax	16	0	11	5	7	7	6	0	15	5	17	5	4	4	12	25	3	9
Newly ind. economies	nie	16	0	6	7	7	5	5	0	13	4	17	3	3	4	9	21	3	8
Dev. East Asia & NIEs	ean	16	0	9	7	11	6	6	0	15	5	19	5	4	4	12	25	3	10
East Asia	eat	16	0	9	8	10	6	7	0	15	5	18	4	5	4	11	23	3	10
Low- and mid-income x	lmx	11	0	4	6	10	4	4	0	7	4	6	3	1	4	6	22	3	9
High-income	hiy	14	0	5	8	7	5	5	0	11	6	14	3	4	1	11	18	2	11
Low- and mid-income	lmy	14	0	8	7	11	6	5	0	12	5	17	4	1	4	7	23	3	9

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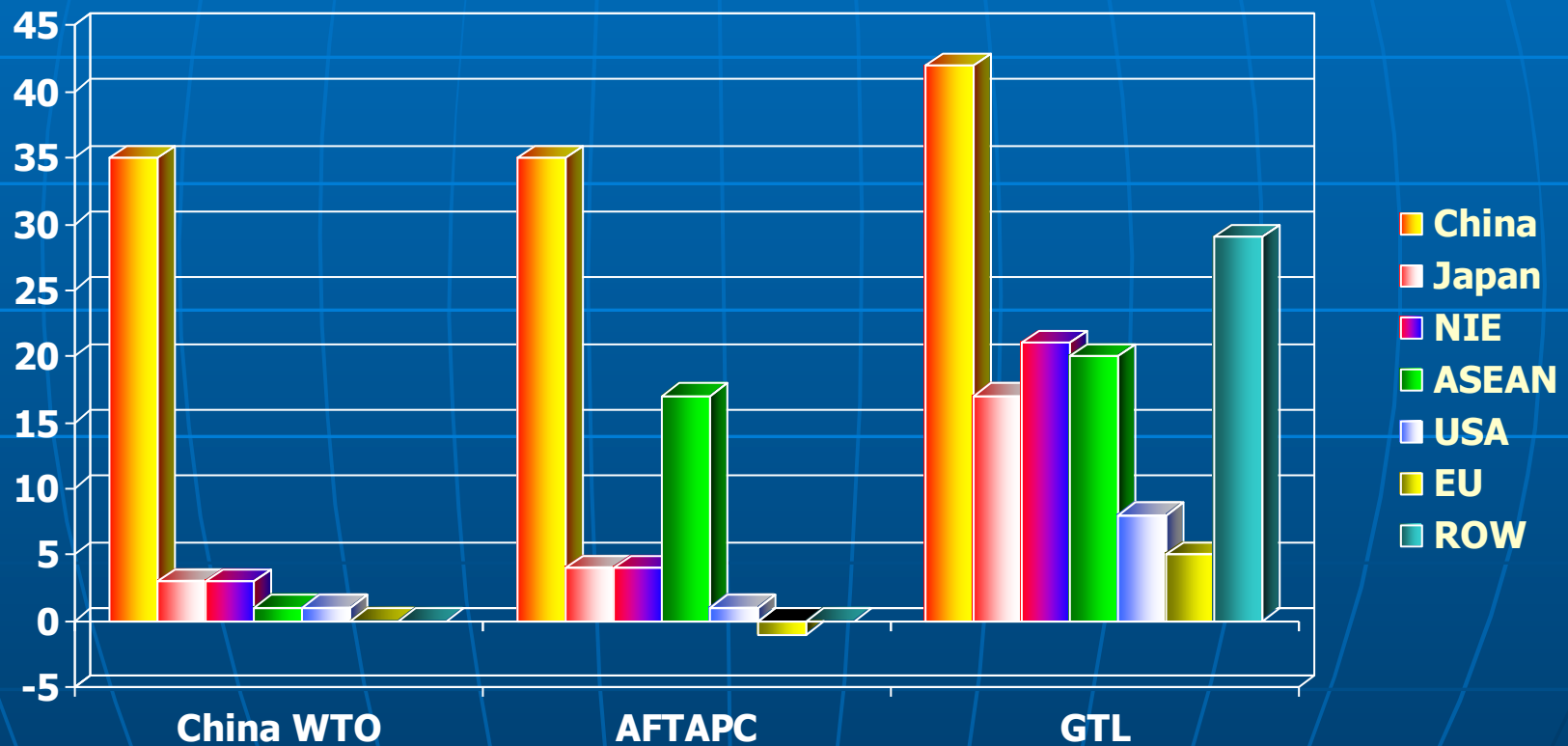
Bilateral, Trade Weighted Tariffs

	China	Japan	NIE	ASEAN	USA	EU	ROW	Ave
China	12.4	7.9	13.7	7.1	5.4	5.6	13.6	8.1
Japan	12.4	7.0	6.5	7.4	2.3	3.6	11.3	6.4
NIE	13.4	5.3	3.1	6.7	3.0	3.9	10.7	7.2
ASEAN	10.9	4.7	5.3	4.3	3.3	3.9	8.3	5.2
USA	11.4	9.3	9.4	3.6	2.0	2.7	6.8	6.0
EU	9.0	3.7	6.5	4.0	2.2	2.0	9.3	2.6
ROW	11.7	12.4	5.8	3.8	3.0	6.4	9.1	6.5
Ave	11.5	7.8	7.2	5.0	2.9	1.8	8.9	4.8

Source: GTAP 5 Database

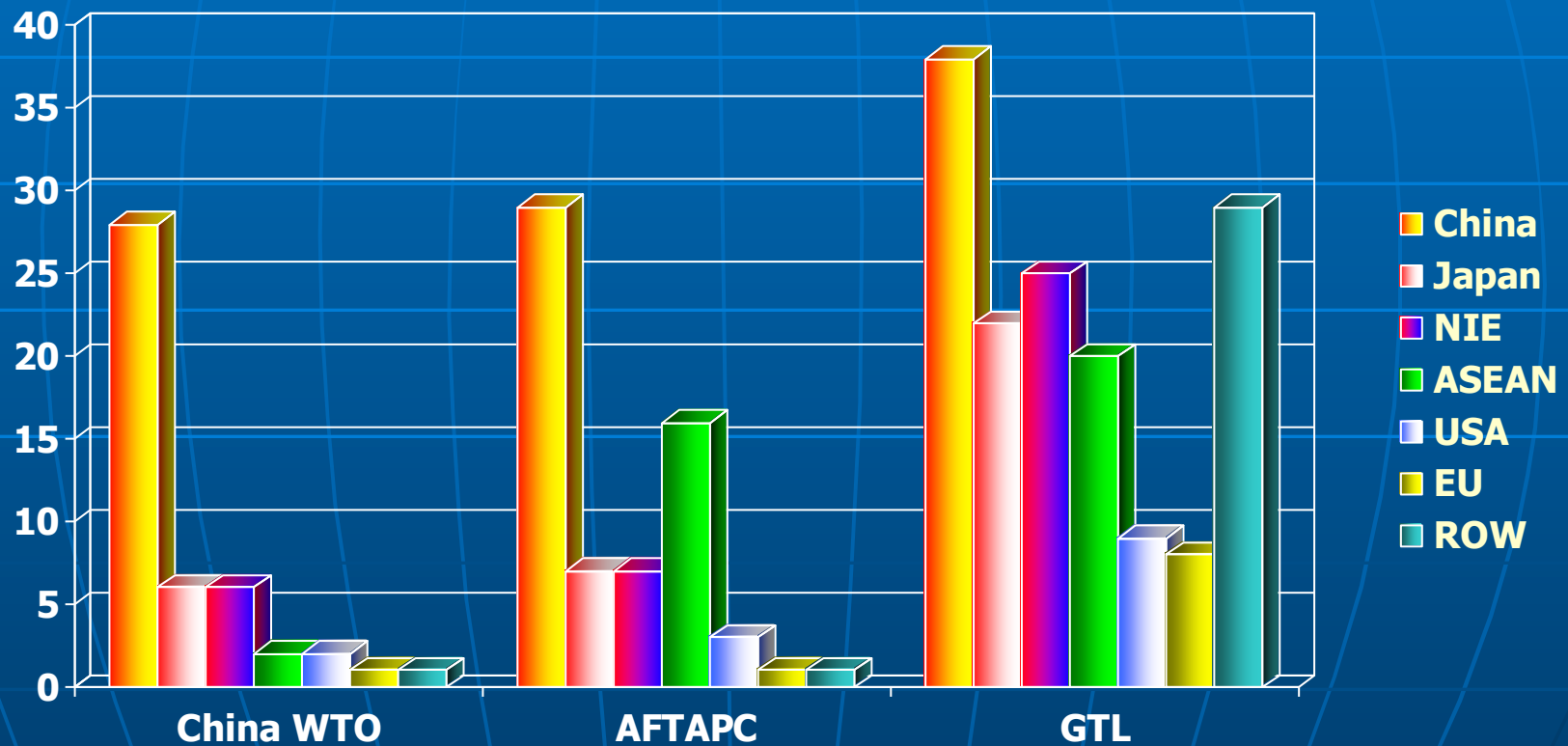
Exports

(percentage change from Baseline in 2020)



Imports

(percentage change from Baseline in 2020)



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China WTO – Bilateral Trade Flows

(percentage change from Baseline in 2020)

<u>Exporter</u>	<u>Importer</u>							Total
	China	Japan	NIE	ASEAN	USA	EU	ROW	
China	0	37	43	36	31	35	32	34
Japan	38	0	-4	-6	-7	-5	-5	3
NIE	32	-10	-7	-11	-13	-10	-10	3
ASEAN	28	-4	-1	-2	-5	-3	-4	1
USA	24	-1	1	-1	0	-1	-1	1
EU	22	-0	1	-1	-2	-1	-2	-0
ROW	13	-0	2	2	-2	-1	-1	-0
Total	26	5	6	2	2	0	1	3

AFTAPC – Bilateral Trade Flows

(percentage change from Baseline in 2020)

<u>Exporter</u>	<u>Importer</u>							Total
	China	Japan	NIE	ASEAN	USA	EU	ROW	
China	0	34	42	66	29	32	30	35
Japan	36	0	-5	12	-10	-7	-7	4
NIE	30	-13	-10	12	-15	-12	-13	4
ASEAN	39	14	12	22	8	11	5	16
USA	24	-1	2	1	0	-1	-2	1
EU	22	-0	2	4	-2	-2	-2	-1
ROW	13	0	3	1	-2	-1	-1	-0
Total	27	7	7	15	2	0	1	5

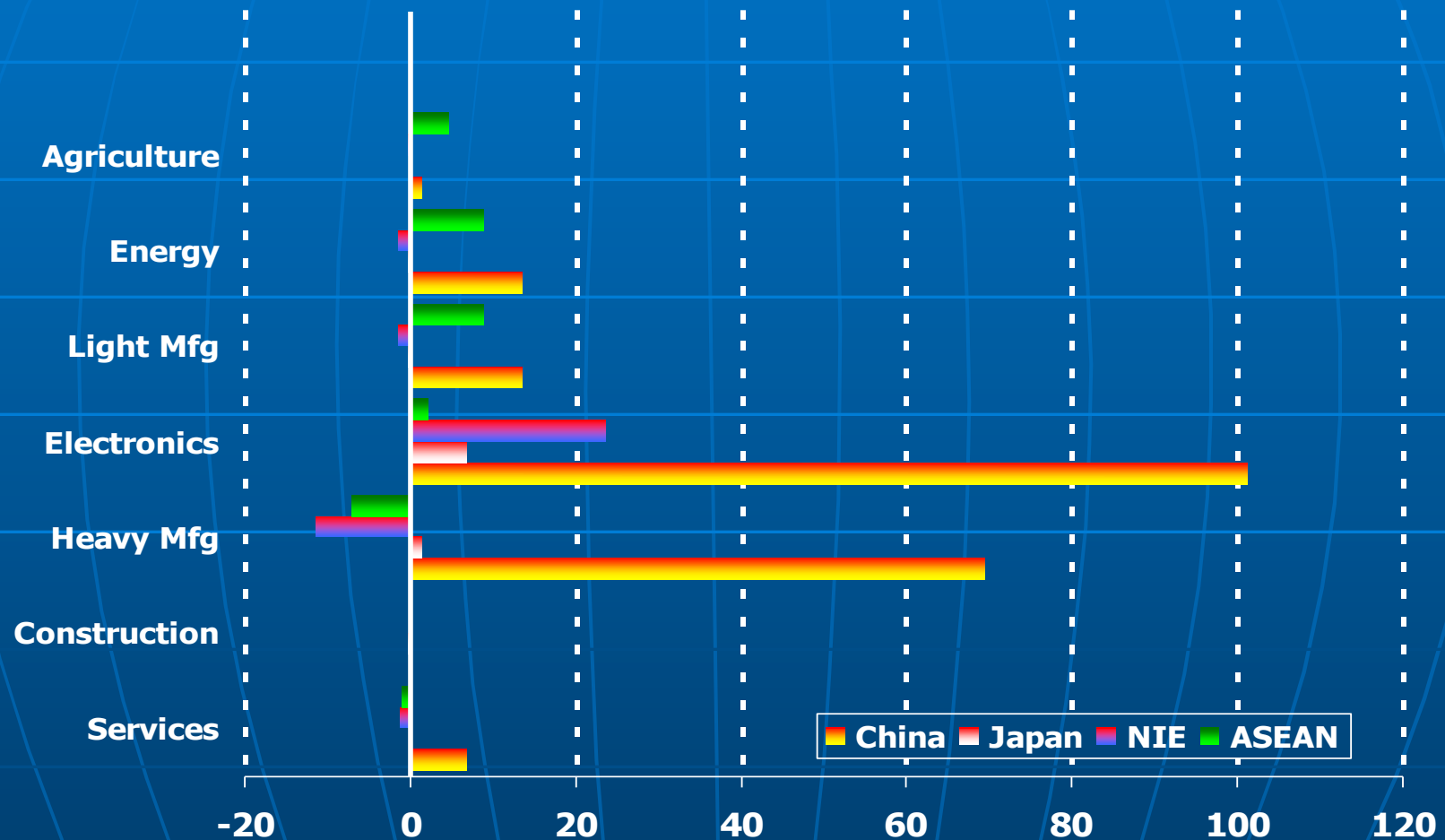
GTL – Bilateral Trade Flows

(percentage change from Baseline in 2020)

Exporter	Importer							Total
	China	Japan	NIE	ASEAN	USA	EU	ROW	
China	0	35	51	51	27	40	65	43
Japan	43	0	15	16	-3	9	22	16
NIE	42	15	8	22	-4	5	22	21
ASEAN	38	21	16	18	10	19	21	20
USA	32	9	18	6	0	8	2	8
EU	38	14	33	17	12	-9	28	5
ROW	29	31	21	17	4	41	47	29
Total	37	22	25	20	9	7	28	17

China WTO: Sectoral Export Volumes

(change from 2020 Baseline in billions of 2000 USD)



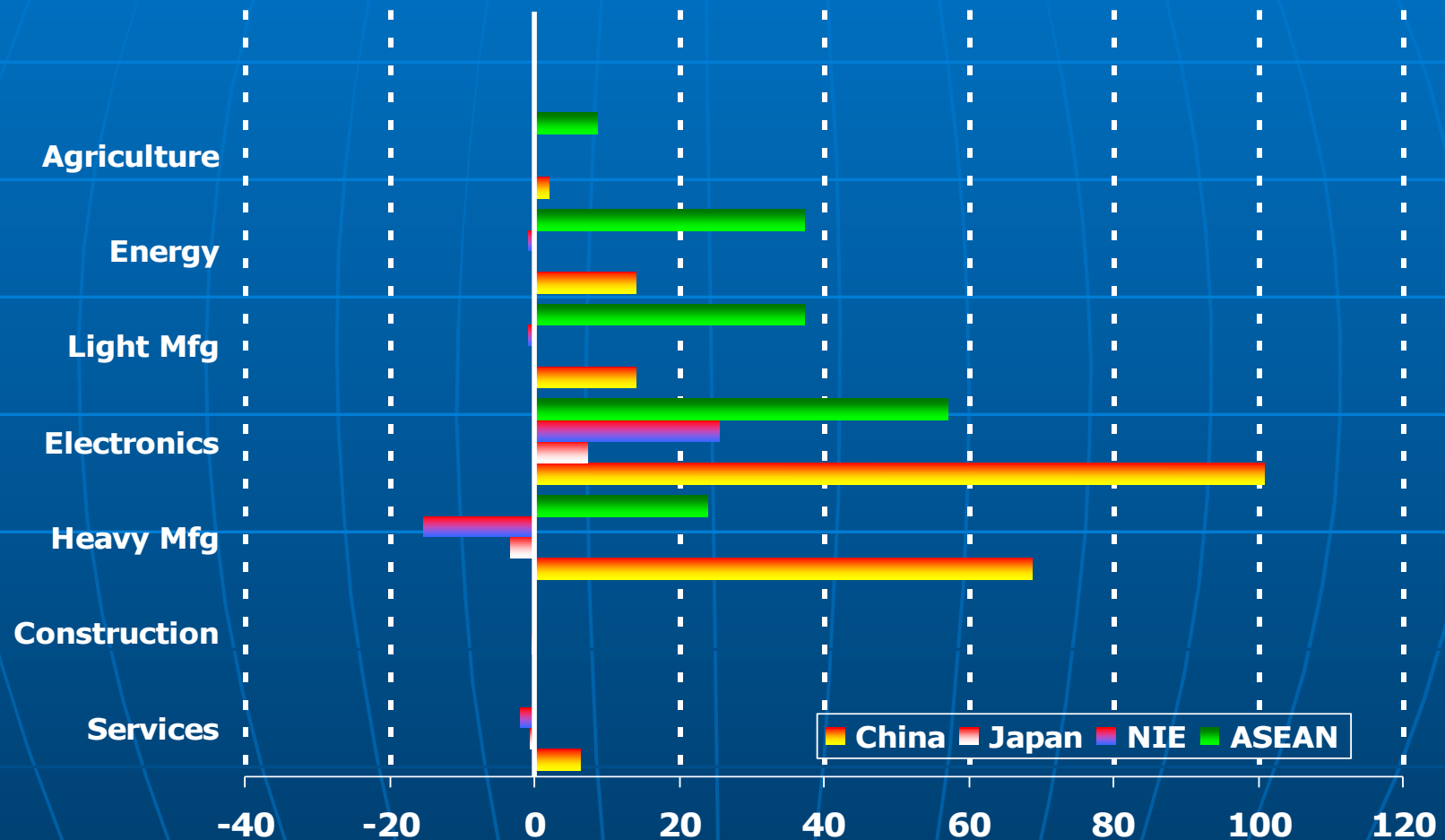
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AFTAPC: Sectoral Export Volumes

(change from 2020 Baseline in billions of 2000 USD)



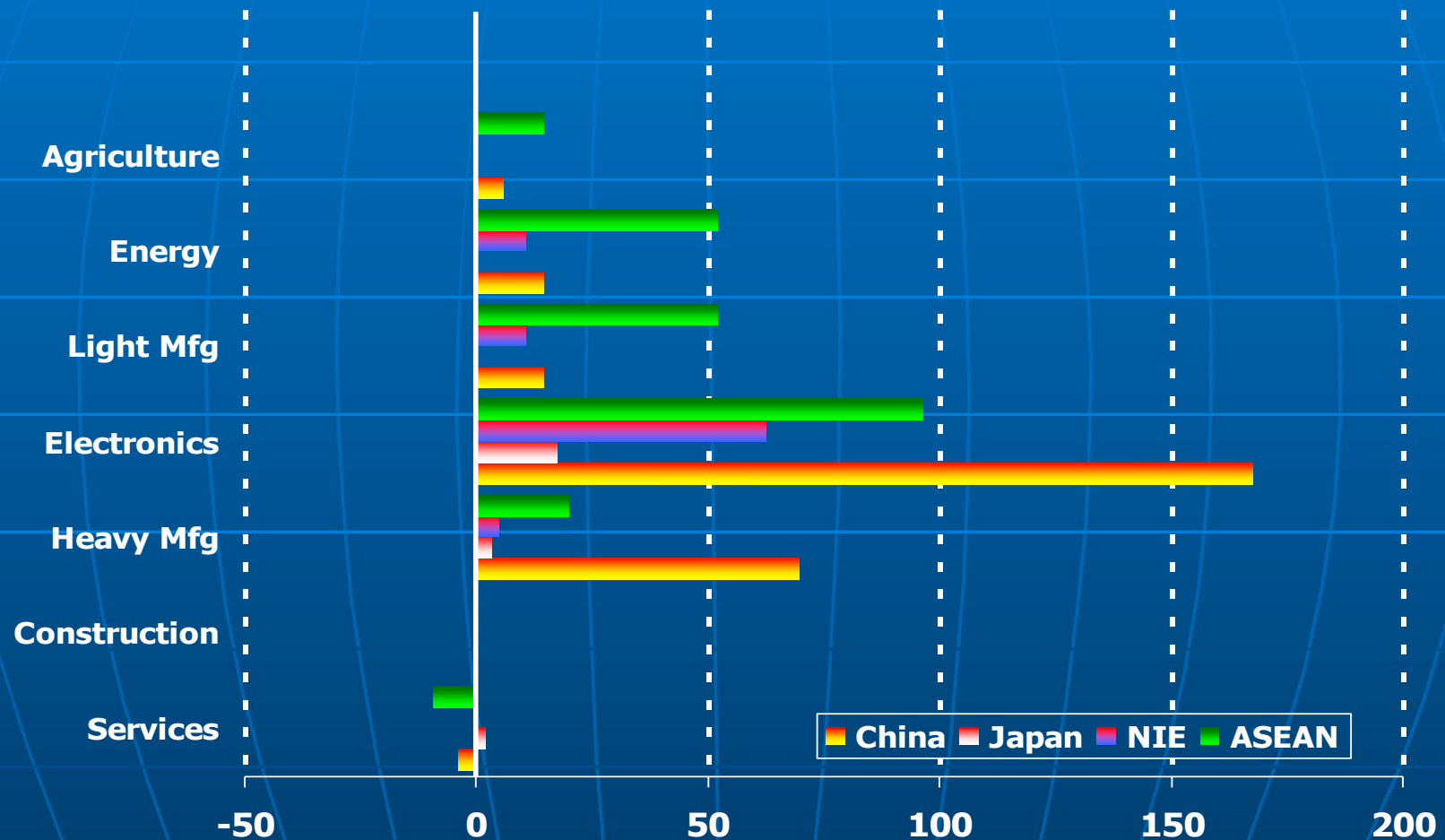
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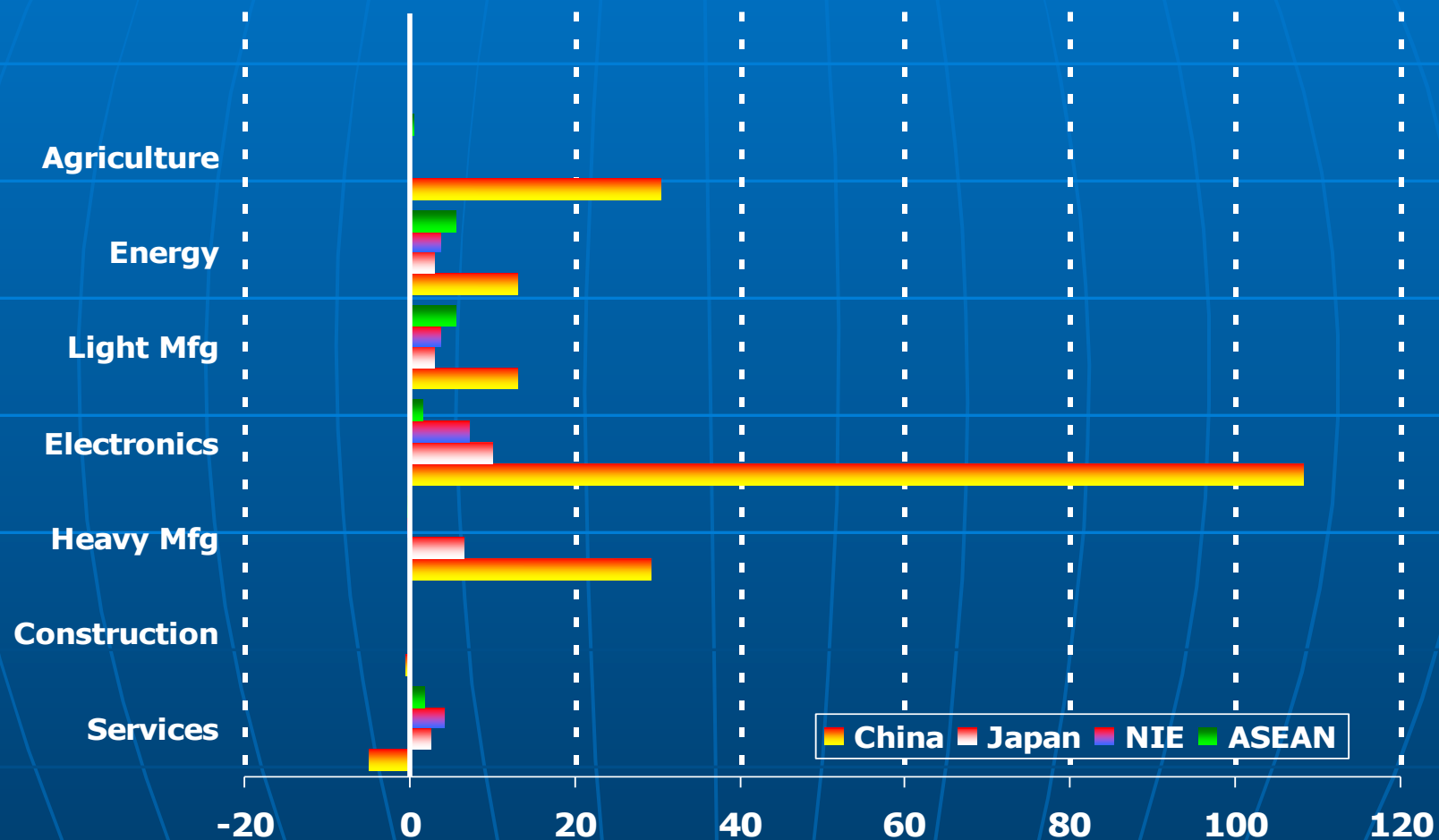
GTL: Sectoral Export Volumes

(change from 2020 Baseline in billions of 2000 USD)



China WTO: Sectoral Import Volumes

(change from 2020 Baseline in billions of 2000 USD)



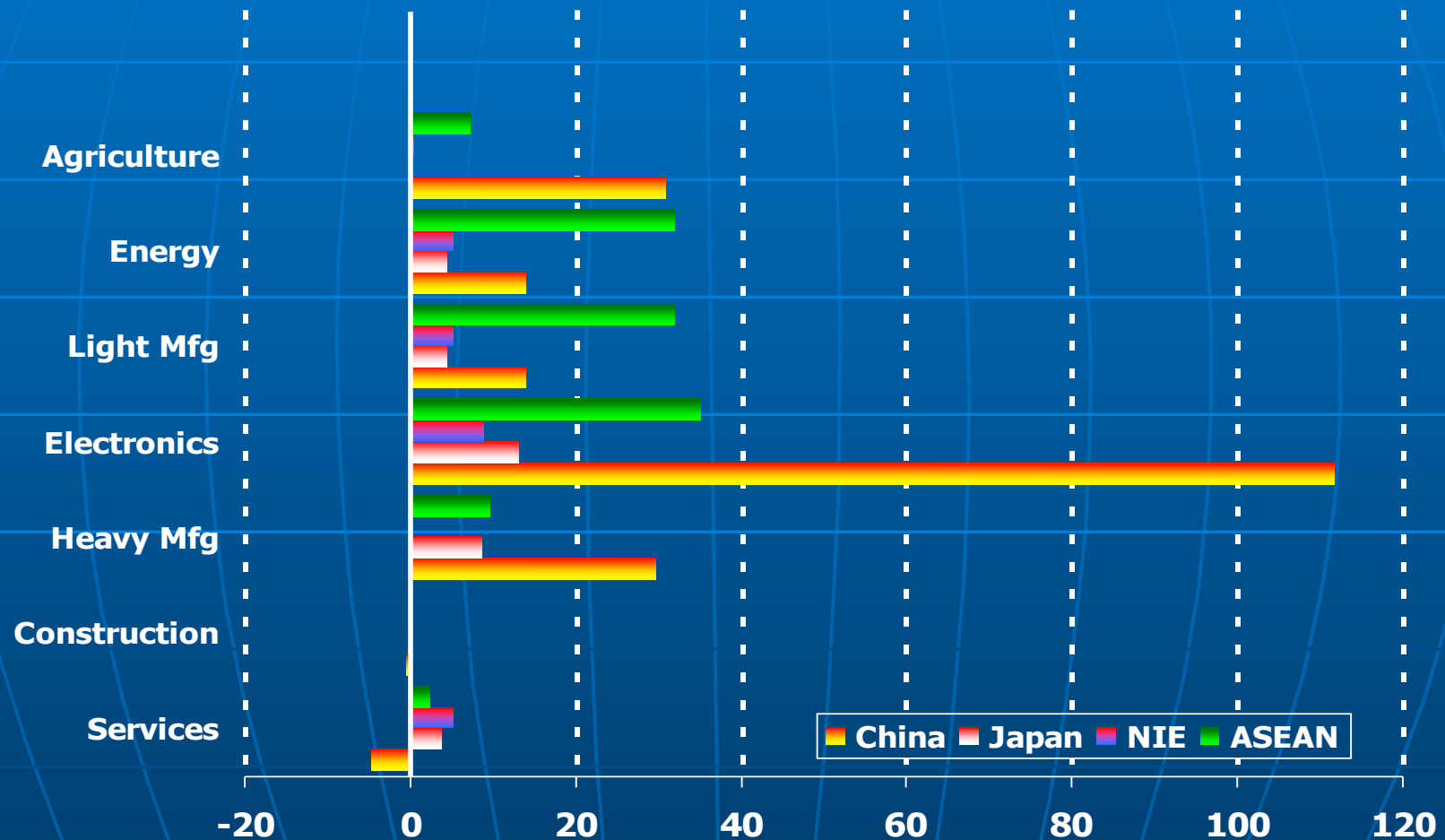
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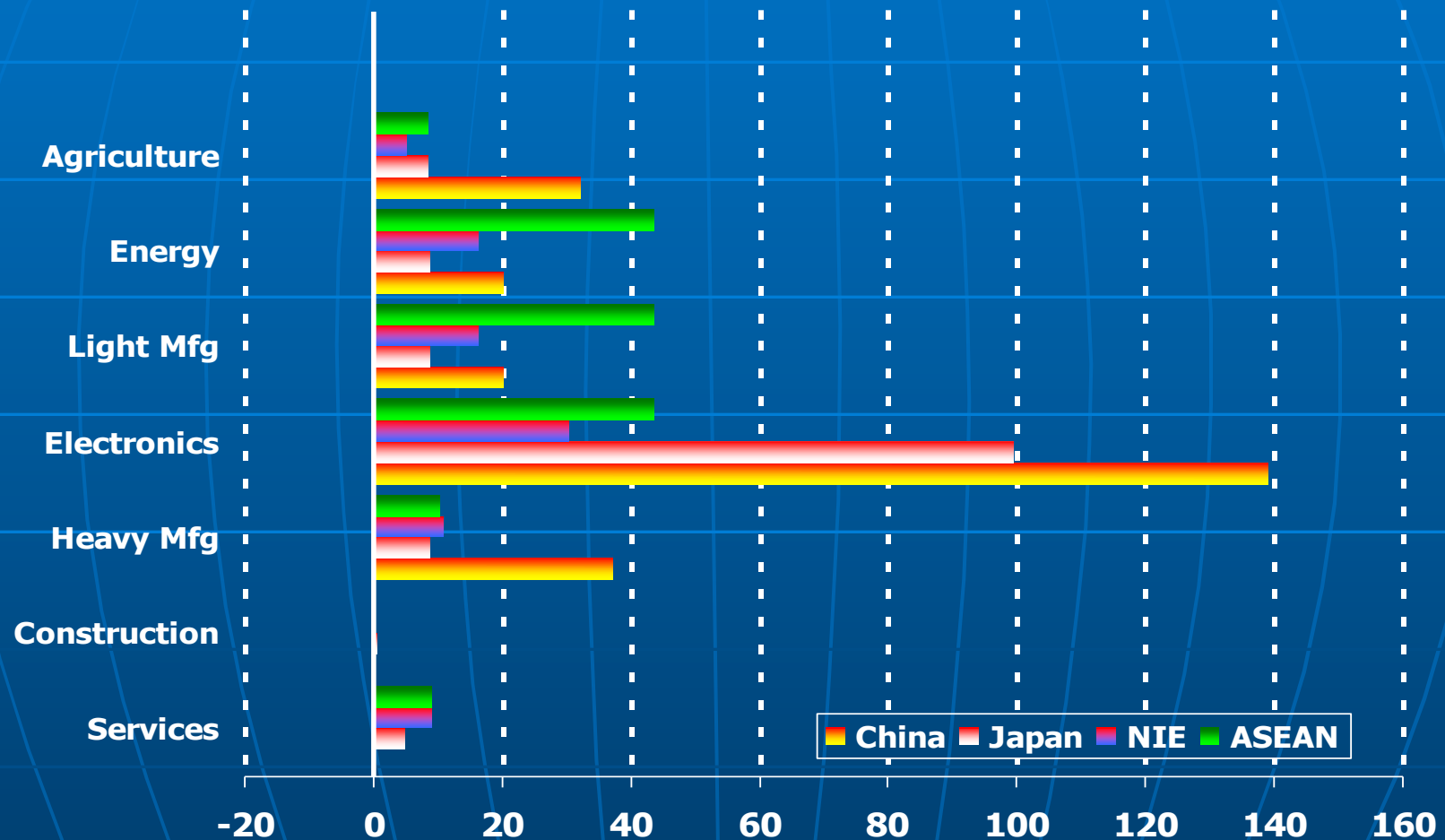
AFTAPC: Sectoral Import Volumes

(change from 2020 Baseline in billions of 2000 USD)



GTL: Sectoral Import Volumes

(change from 2020 Baseline in billions of 2000 USD)



Conclusions

1. China will be the largest trading economy in East Asia by 2020.

China will be the region's largest exporter by 2010, but it's largest importer by 2005. The latter fact represents an unprecedented opportunity for neighboring economies.

Conclusions

2. China will develop a structural trade deficit with East Asia and a surplus with Western OECD economies of nearly equal magnitude.

In other words, most of China's trade surplus will ultimately accrue to its regional neighbors. This has profound implications for patterns of North-South and regional capital accumulation.

Conclusions

3. The growth of China's internal market will accelerate other East Asian export growth significantly and create historic opportunities for regional investors.

Provided East Asian economies do not isolate themselves from the process of Chinese trade liberalization, the net effect of China's growth will be hugely positive, as Chinese absorption emerges to dominate regional demand.

Conclusions

4. The optimal response to China's WTO initiative is neither passivity nor protectionism.

Failure to adapt to more open multilateralism will undermine competitiveness, leading to lower domestic productivity growth and crowding out from export markets. A more pro-active approach would include trade liberalization, negotiated Chinese market access, and capital account liberalization.

Conclusions

5. China will be Japan's largest trading partner by 2020.

In terms of both exports and imports, China will become Japan's largest bilateral partner. Japan will also be China's largest individual source of imports. For these reasons, the previous policy conclusions are of special relevance to Japan.

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