

02 Engine of Regional Economy

## Growth Potential of Fukuoka City

Fukuoka Asian Urban Research Center Information & Strategy Office

Taichi GOTO Naohisa HATAKEYAMA Misato YAMADA Version1.1

3HELSINKI 7STOCKHOLM 1COPENHAGEN A Most Livable City in the World



**14**PARIS

**8MUNICH 5WIEN 6ZURICH** 

## Fukuoka 12<sup>th</sup> Most Livable City in the World 2013

Fukuoka city ranked 12<sup>th</sup> in the annual rankings of the "World's Most Livable Cities" announced by London-based lifestyle magazine "Monocle".

Since 2008 Fukuoka city has been placed in the top 25 cities, and is steadily moving upwards in rankings.

**12**FUKUOKA

Evaluation of Fukuoka City for Quality of Life 2013; MONOCLE

2013; 12<sup>th</sup> 2012; 12<sup>th</sup> 2011; 16<sup>th</sup>

2010; 14<sup>th</sup>

2009; 16th

2008; 17<sup>th</sup>

Fukuoka has been hidden under other large cities in Japan, but is attracting attention as the compact urban city located in Kyushu. The 1.5 million population is small for a large city, and people enjoys relaxing urban life with enough green space. Also, the distance to Tokyo, Shanghai and Seoul are almost the same, which makes Fukuoka city the convenient base for an enterprise aiming to go into Asia. Fukuoka has clean air, mountains and sea close by, thriving food culture and art scenes, and institutes of world-class high-tech companies. However, Fukuoka still needs some improvements including to halt a talent drain of college graduates, to set up a bicycle rental system, to promote local farmers, and to make better use of seaside property.

Electric car charging points: 52

**4)TOKYO** 

Culture: 175 film screens, 60 theatres, 50 galleries and 9 museums.

Bookshops: 567

**(13)KYOTO** 

Green space: 76 square meters per person

Street life: Streets are safe to walk and have enough streetlights. Although few cafes or restaurants have outdoor terrace seats, beer gardens in summer are popular.

Monocle fixes: Fukuoka needs to lure more multinational corporations that are looking for a base in Asia. Also Fukuoka needs to prevent a talent drain.

**(1)HONG KONG** 

**(15)SINGAPORE** 

9SYDNEY2MELBOURNE

**9AUCKLAND** 



Population in Fukuoka city is projected to grow for next 20 years, which is nationally remarkable as population in Japan has been and will greatly decline. Although population declines in whole Kyushu region, concentration in Fukuoka city is expected to accelerate.

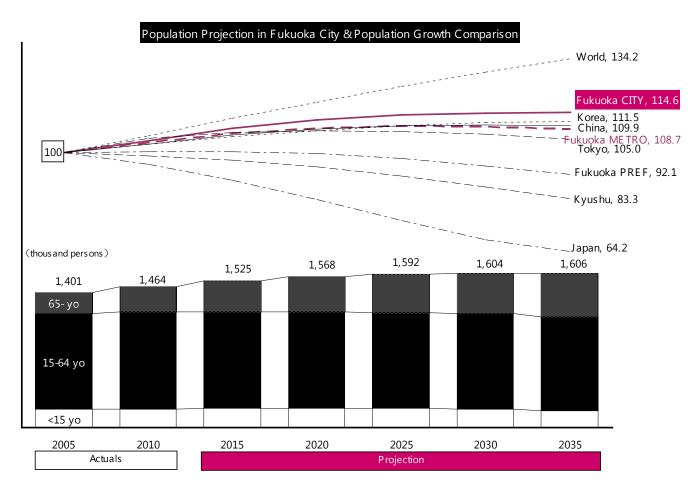
While cities are driving the world economy, monopolar concentration into the capital city is still continued in Japan, exceptionally among developed countries. In order to enhance sustainability and resilience of the national economy, each metropolitan area in Japan needs to drive economic growth autonomously in original and creative ways and resultantly position itself in global economy. Also, the core city of the metropolitan area is expected to take a role of leading the surrounding area with a strong hub function and a control function.

Compared with Hokkaido region which is a provincial economic area located at the north tip of Japan, Kyushu has larger economic scale, higher industry accumulation, and a more diversified industry portfolio. With these economic activities and foundation, the Fukuoka city's economic activity majoring in service industry seems prospering.

Fukuoka city is expected to attract more people and investments by raising its presence in the world as a core city of Kyushu economic region.

#### Projected growth in population over next 20 years.



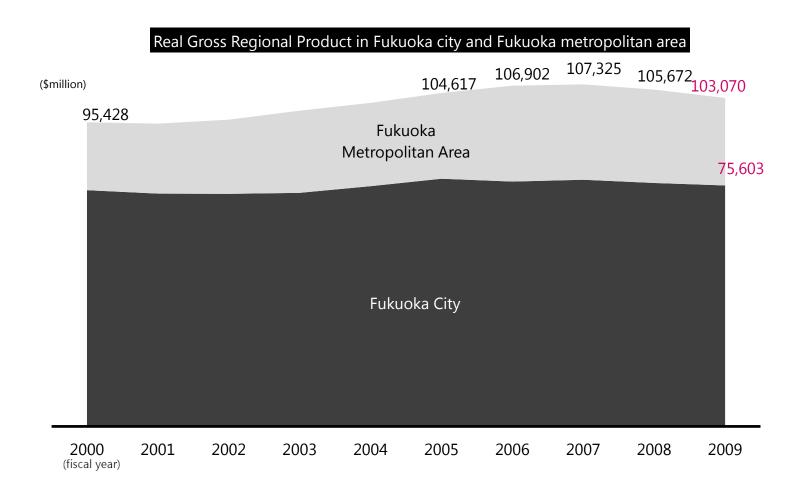


While population tends to decrease in Japan, population in Fukuoka city is forecasted to increase over next 20 years. Working age population (15-64 years old) is also expected to keep the current level for the time being.

Fukuoka METRO=Fukuoka Metropolitan Area; Fukuoka PREF=Fukuoka Prefecture; Tokyo=Tokyo 23 wards.

## Approx. \$100 Billion of Gross Regional Product in Fukuoka Metropolitan Area.





Gross regional product (GRP) in Fukuoka city is approximately \$75 billion, which is more than 70% of GRP in the Fukuoka metropolitan area.

## Competitive scale of Fukuoka economy in the world.



#### World Major Cities GRP & Population Comparison (2008)

	500-		Chicago London Paris	Tokyo New York Los Angeles
Estimated GDP in 2008 (\$bn at PPPs)	300-<500	Washington DC Boston Dallas/Fort Worth Atlanta San Francisco/Oakland	Philadelphia Hong Kong	Osaka/Kobe Mexico City Sao Paulo Buenos Aires, Moscow
	<300	Houston Detroit Seattle Singapore Sydney Fukuoka Metropolitan Area	Miami Seoul Toronto Madrid Fukuoka Prefecture	Shanghai Mumbai (Bombay) Rio de Janeiro
Рор	ulation (millions)		5-<10	10-

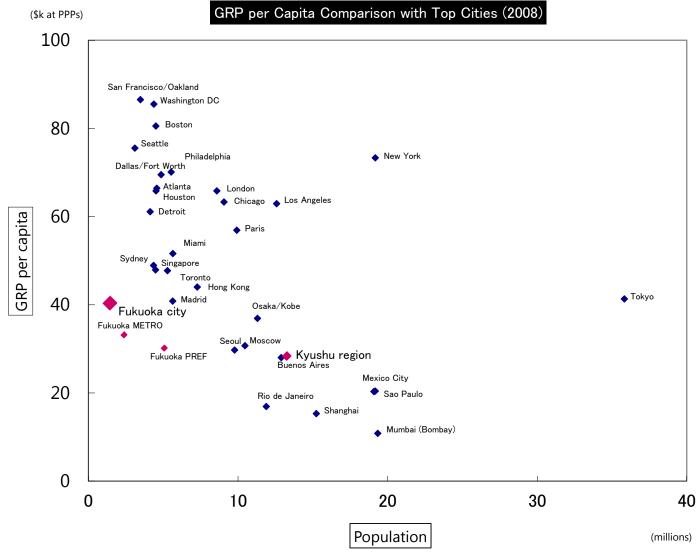
Fukuoka city is the center of economy in Kyushu region. Comparing GRP (Gross Regional Product) in global scale, Kyushu has the competitive economic scale with major large metropolitan regions.

GRP=Gross Regional Product; PPPs=Purchasing Power Parities.

Note: Data of Kyushu and Fukuoka Prefecture (2008) are added to data from PricewaterhouseCoopers, "Global city GDP rankings 2008-2025" and compared. 1 Yen=116.8458138 US dollars by OECD Purchasing Power Parities for GDP (2008). As a reference, ratio of "GRP: Population" for Fukuoka City is "58: 1.43", for Fukuoka Metropolitan Area is "79: 2.37". Fukuoka Metropolitan Area includes Fukuoka city, Chikushino city, Kasuga city, Onojo city, Munakata city, Dazaifu city, Koga city, Fukutsu city, Itoshima city, Chikushi-gun Nakagawa town, Kasuya-gun Umi town, Sasaguri town, Shime town, Shingu town, Hisayama town, Kasuya town.

#### Relatively high economic status among Asian cities.



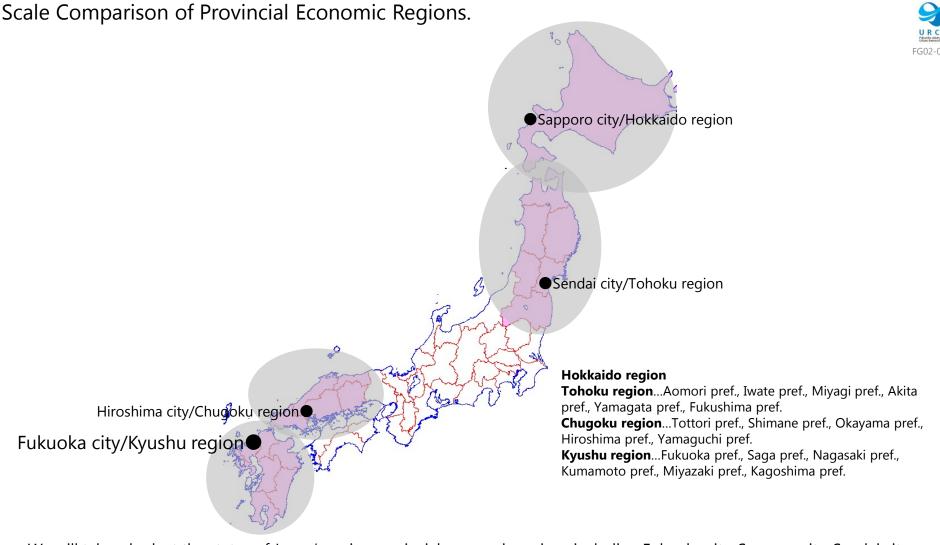


Although the difference of GRP per capita between Fukuoka city and the world's top cities is still large, Fukuoka city has the highest amount in Kyushu.

Fukuoka METRO=Fukuoka Metropolitan Area; Fukuoka PREF=Fukuoka Prefecture; GRP=Gross Regional Product; PPPs=Purchasing Power Parities.

Note: 1 Yen=116.8458138 US dollars by OECD Purchasing Power Parities for GDP (2008). Fukuoka Metropolitan Area (9 cities and 8 towns in total) includes Fukuoka city, Chikushino city, Kasuga city, Onojo city, Munakata city, Dazaifu city, Koga city, Fukutsu city, Itoshima city, Chikushi-gun Nakagawa town, Kasuya-gun Umi town, Sasaguri town, Shime town, Sue town, Shingu town, Hisayama town, Kasuya town.

Source: PricewaterhouseCoopers . "Global city GDP rankings 2008-2025". PricewaterhouseCoopers UK Economic Outlook November 2009; Cabinet Office, Government of Japan (Nominal 2008)



We will take a look at the status of Japan's major provincial economic regions including Fukuoka city, Sapporo city, Sendai city, Hiroshima city and other urban cities besides Japan's three large metropolitan areas.

Note: Data for each metropolitan area are summary data of municipalities consisting each metropolitan consortium.

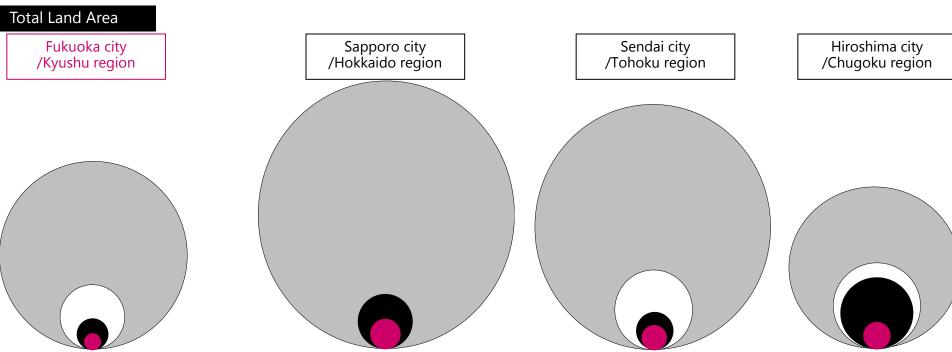
Fukuoka Metropolitan Area (9 cities and 8 towns in total) includes Fukuoka city, Chikushino city, Kasuga city, Onojo city, Munakata city, Dazaifu city, Koga city, Fukutsu city, Itoshima city, Chikushi-gun Nakagawa town, Kasuya-gun Umi town, Sasaguri town, Shime town, Sue town, Shingu town, Hisayama town, and Kasuya town. Sapporo Metropolitan Area (6 cities, 1 town, and 1 village in total) includes Sapporo city, Ebetshu city, Chitose city, Eniwa city, Kitahiroshima city, Ishikari-gun Tobetsu town, Shinshinotsu village. Sendai Metropolitan Area (5 cities, 8 towns, and 1 village in total) includes Sendai city, Shiogama city, Natori city, Tagajo city, Iwanuma city, Watari-gun Watari town, Yamamoto town, Miyagi-gun Matshushima town, Shichigahama town, Rifu town, Kurokawa-gun Taiwa town, Osato town, Tomiya town, and Ohira village. Hiroshima Metropolitan Area (10 cities and 6 towns in total) includes Hiroshima city, Kure city, Takehara city, Otake city, Higashihiroshima city, Hatshukaichi city, Akitakata city, Etajima city, Aki-gun Fuchu town, Kaita town, Kumano town, Saka town, Yamagata-gun Akiota town, Kitahiroshima town, Iwakuni city (Yamaguchi pref.), and Yanai city (Yamaguchi pref.).

Scale Comparison of Provincial Economic Regions 1 "Land Area": Hokkaido and Tohoku has large land area.

	m²)	iriciai Ecoi	ionne negions	i Lana Arca .	Tiokkarao aria	Torrord rids lary
		Total land Habitable land	Fukuoka/Kyuchu	Sapporo/Hokkaido	Sendai/Tohoku	Hiroshima/Chugoku
		Region	42,193	78,421	66,952	31,922
		Region	15,336	22,207	20,350	8,433
		PREF	4,979		7,286	8,480
			2,775		3,145	2,291
		METRO	1,170	3,540	1,649	5,767
			682	1,427	821	1,520
П		City	342	1,121	786	905
		— City	230	440	341	292



FG02-008

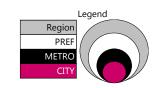


Total land area in Hokkaido and Tohoku region is large. Hokkaido land area is almost twice as large as Kyushu land area.

Scale Comparison of Provincial Economic Regions 2 "Population": Large population size in Kyushu and high density in Fukuoka city.

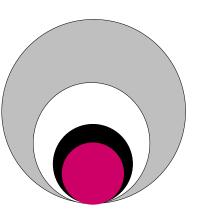


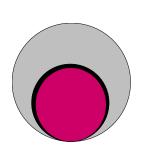
<u>(p</u>	(persons)							
			Fukuoka/Kyushu	Sapporo/Hokkaido	Sendai/Tohoku	Hiroshima/Chugoku		
		Region	13,113,035	5,444,307	9,109,171	7,479,616		
		PREF	5,087,484		2,325,759	2,841,889		
		METRO	2,458,911	2,335,333	1,549,845	2,244,060		
		City	1,500,899	1,913,545	1,065,019	1,181,758		

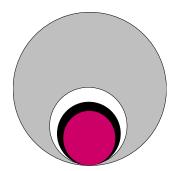


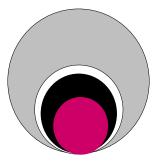
Population Scale

Fukuoka city /Kyushu region Sapporo city /Hokkaido region Sendai city /Tohoku region Hiroshima city /Chugoku region









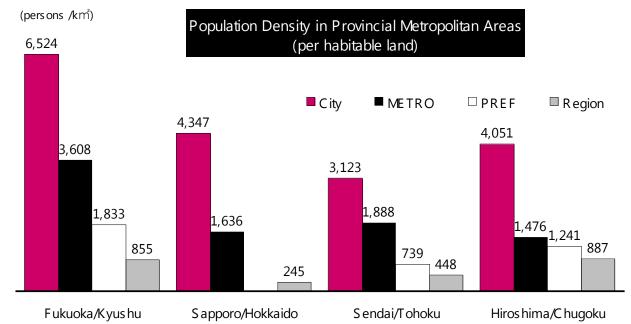
Although the size of land area in Kyushu region is smaller among provincial economic regions, population scale in Kyushu is the largest and is more than twice as large as the population in Hokkaido region.

The share of Fukuoka city's land area is only 0.8% in Kyushu region, but its population share is 11.4%, which indicates the high population density in Fukuoka city.

# Scale Comparison of Provincial Economic Regions 3 "Population Density": Large population size in Kyushu and high density in Fukuoka city.



(p	(persons per km)						
	per Total land Fukuoka/K		Sapporo/Hokkaido	Sendai/Tohoku	Hiroshima/Chugoku		
r	per Habitable land				-		
	Region	311	69	136	234		
		855	245	448	887		
	PREF	1,022		319	335		
	PNEF	1,833		739	1,241		
	METRO	2,101	660	940	389		
	WILTRO	3,608	1,636	1,888	1,476		
	City	4,392	1,707	1,355	1,305		
	City	6,524	4,347	3,123	4,051		



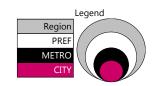
Population density in Kyushu region is high especially in Fukuoka city and Fukuoka metropolitan area. Population density per habitable land exceeds 6,000 people in Fukuoka city.

Scale Comparison of Provincial Economic Regions 4 "Gross Regional Product": Large GRP in Kyushu and high integration density in Fukuoka city.

(million VENI)

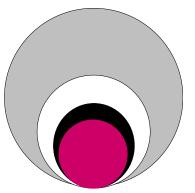


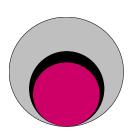
(	Real Gross Regional Product		Fukuoka/Kyushu	Sapporo/Hokkaido	Sendai/Tohoku	Hiroshima/Chugoku
		Region	47,184,900	19,237,476	35,720,101	30,482,523
		PREF	18,962,222		8,879,473	
			,		•	·
	ш	METRO	9,776,918	8,274,468	5,444,119	8,677,494
		City	7,074,197	6,544,241	4,069,067	4,612,310

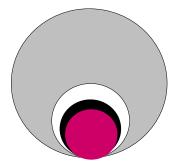


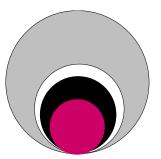
#### **Regional Product**

Fukuoka city /Kyushu region Sapporo city /Hokkaido region Sendai city /Tohoku region Hiroshima city /Chugoku region







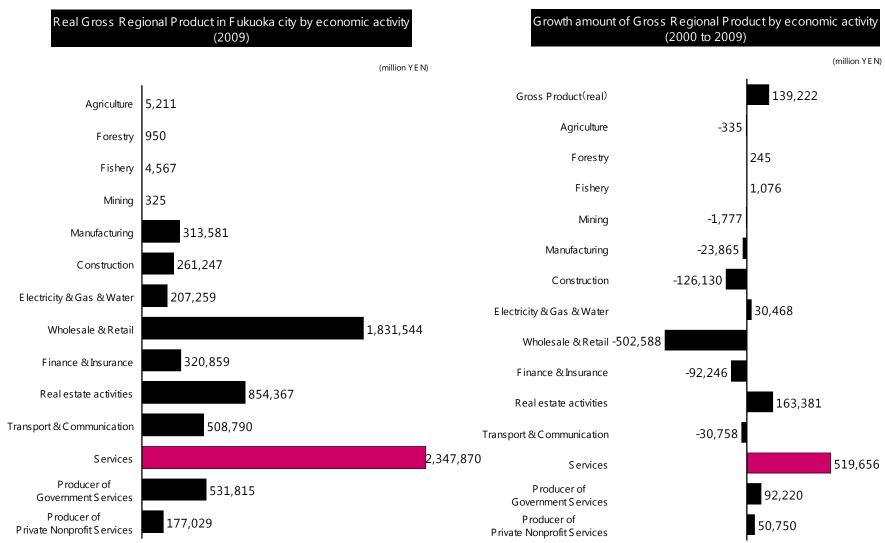


As well as the population scale, Gross Regional Product in Kyushu region is the largest among provincial economic regions, and the GRP in Kyushu is more than twice as large as the GRP in Hokkaido region and is larger than Tohoku region and Chuqoku region by 10 trillion YEN.

Fukuoka city is becoming stronger as a hub of Kyushu economy. Scale of Kyushu economy is the largest among provincial economic regions in Japan, and Fukuoka city has been developing supported by these large backbones.

## The key industry, Service Industry is growing.

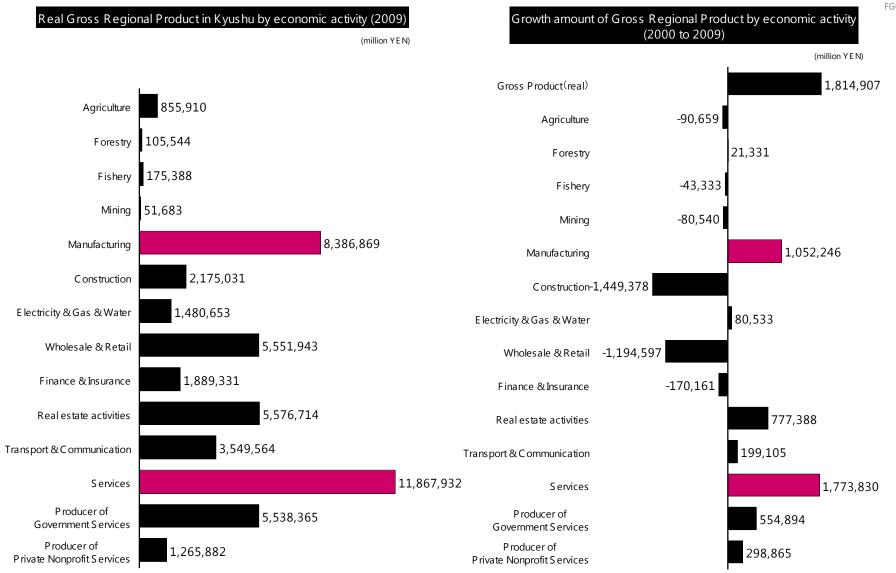




Fukuoka city is a place mainly with commerce and service industries. In 2000 the production amount of commerce decreased, however, the production amount of service industry has grown larger.

## Steady growth in manufacturing and service industries in Kyushu.

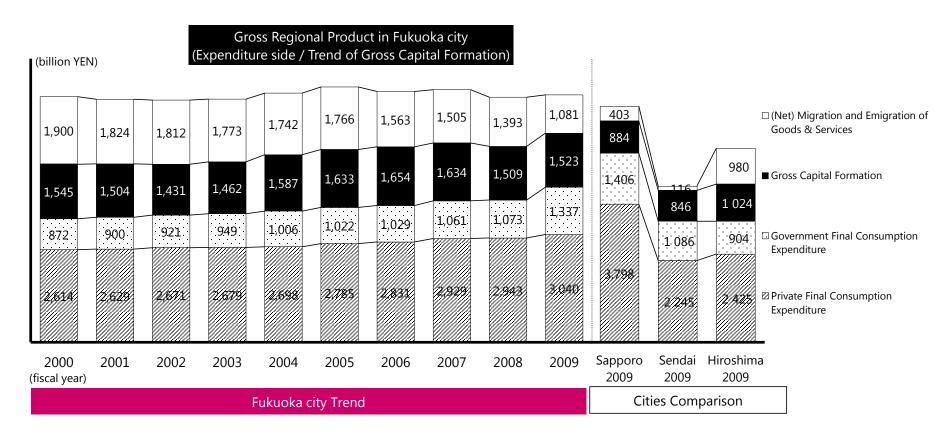




In Kyushu economy, share of manufacturing and service industries are high. These two industries are continuing to grow remarkably in recent years.

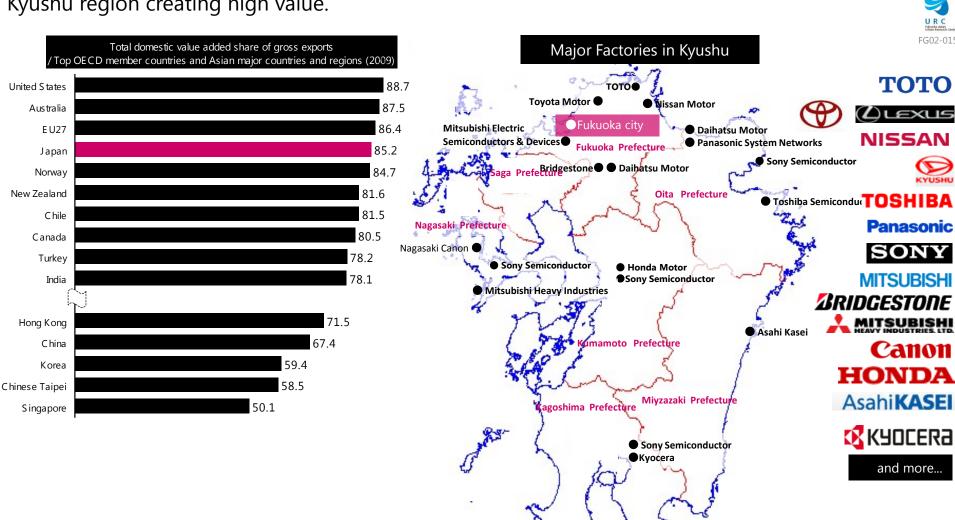
Steady capital investment in private sector.





In Fukuoka city, the amount of "Gross Capital Formation" majoring private capital investment has been shifting steadily at the scale of 1.5 trillion Yen. Economic activities in Fukuoka city are not excessively replying on public investment.

#### Kyushu region creating high value.



Domestic value added share of gross exports in Japan is one of the highest in the world, and is very high compared to other Asian countries. As a hub of Kyushu economy, Fukuoka city attracts many people and investments. Many of the major factories and research institutes located in Kyushu region are closely associated with economic activities in Fukuoka city.

#### Research & Development institutes in Kyushu ●Fukuoka Prefecture Innovation Plaza Fukuoka of the Japan Science and Technology (JST) Agency Research Center for Hydrogen Industrial Use and Storage, National Institute of Advanced Industrial Science and Technology Fukuoka Industrial Technology Center Fukuoka Agricultural Research Center Fukuoka Forest Research and Extension Center Fukuoka Fisheries and Marine Technology Research Center Fukuoka Research Center for Recycling Systems Fukuoka city Kitakyushu Asian Center for Low Carbon Society Fukuoka Hydrogen Energy Product Testing Research Fukuoka Institute of System LSI Design Industry Fukuoka Bio Incubation Center Joint Research Center of the Kitakyushu Science and Research Park Oita Prefecture **Experimental Center for Social System Technologies** Research Center for Three-Dimensional Semiconductors Kyushu University Nagasaki Prefecture Kyushu Institute of Technology Kumamoto Prefecture The University of Kitakyushu Kyushu Kyoritsu University Kvushu Sangvo University Faculty of Humanity-Oriented Science and Miyzazaki Prefectur Engineering of Kinki University Kurume Institute of Technology Nishinippon Institute of Technology Fukuoka University Fukuoka Institute of Technology Graduate School of Waseda University ●Nagasaki Prefecture Unzen Station of the National Center for Seeds Kagoshima Prefecture and Seedlings SaikaiNational Fisheries Research Institute of the Fisheries Research Agency ●Kumamoto Prefecture Industrial Technology Center of Nagasaki Kumamoto Station of the National Livestock Breeding Ceramic Research Center of Nagasaki Nagasaki Prefectural Institute of Fisheries National Agriculture and Food Research Organization Nagasaki Agricultural and Forestry Technical Kyushu Research Center of the Foresty and Forest **Development Center** Products Research Institute Fruit and Tree Research Division of the

Kyushu Regional Breeding Office of the Forest Tree

Breeding Center of the Forestry and Forest Product

Kumamoto Prefectural Agricultural Research Center

Kumamoto Industrial Research Institute

Kumamoto Campus of Tokai University Aso Campus of Tokai University

Kumamoto Prefecture Forestry Research and

Kumamoto Prefectural Fisheries Research Center

Research Institute

Instruction Station

Kumamoto University Sojo University

●Saga Prefecture

Light Research Center

Saga University

National Institute of Advanced Industrial Science and Technology (AIST) AIST Kyushu Saga Ceramics Research Laboratory Industrial Technology Center of Saga Saga Prefectural Fruit Tree Experiment Station Saga Prefectural Animal Husbandry **Experiment Station** Saga Prefectural Genkai Fisheries Research and Development Center Saga Prefectural Ariake Fisheries Research and **Development Center** Saga Prefectural Forestry Experiment Station SAGA Light Source, Kyushu Synchrotron

#### ■Oita Prefecture

The Oita Prefectural Institute of Public Health and **Environmental Science** Oita Industrial Research Center Oita Prefectural Agriculture, Forestry and Fisheries Research Center Oita University Nippon Bunri University

FG02-016

#### ●Miyazaki Prefecture

**Breeding Center** Miyazaki Prefectural Forestry Technology Center Miyazaki Prefecture Industrial Technology Center Miyazaki Prefecture Foods Development Center Miyazaki Agricultural Research Institute Miyazaki Livestock Research Institute Miyazaki Prefectural Fisheries Experimental Station University of Miyazaki Minami Kyushu University

Miyazaki Station of the National Livestock

#### ●Kagoshima Prefecture

Research Center for Medicinal Plant Resources. the National Institute of Biomedical Innovation Kagoshima Station of the National Center for Seeds and Seedlings Kagoshima Prefectural Institute of Industrial Technology

Kagoshima Prefectural Oshima-Tsumugi

Instruction Center

Kagoshima Prefectural Institute for Agricultural Development

Kagoshima Prefectural Forestry Technology

Kagoshima Prefectural Fisheries Technology and **Development Center** Kagoshima University

Source: Kyushu Bureau of Economy, Trade and Industry

Nagasaki Agricultural and Forestry Technical

Animal Husbandry Research Division of the

Nagasaki Agricultural and Forestry Technical

Nagasaki Institute of Applied Science

Development Center

**Development Center** 

Nagasaki University