

* Economic and Industrial Forecast of Japan to 2030

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- * Describe new version of Jidea (9).
- * Baseline assumptions
- * Demographics, labor market, decreasing GDP and consumption
- * Stagnation of labor productivity
- * Investment outlook
- * International trade
- * Changing IO structure
- * Future work

* Overview

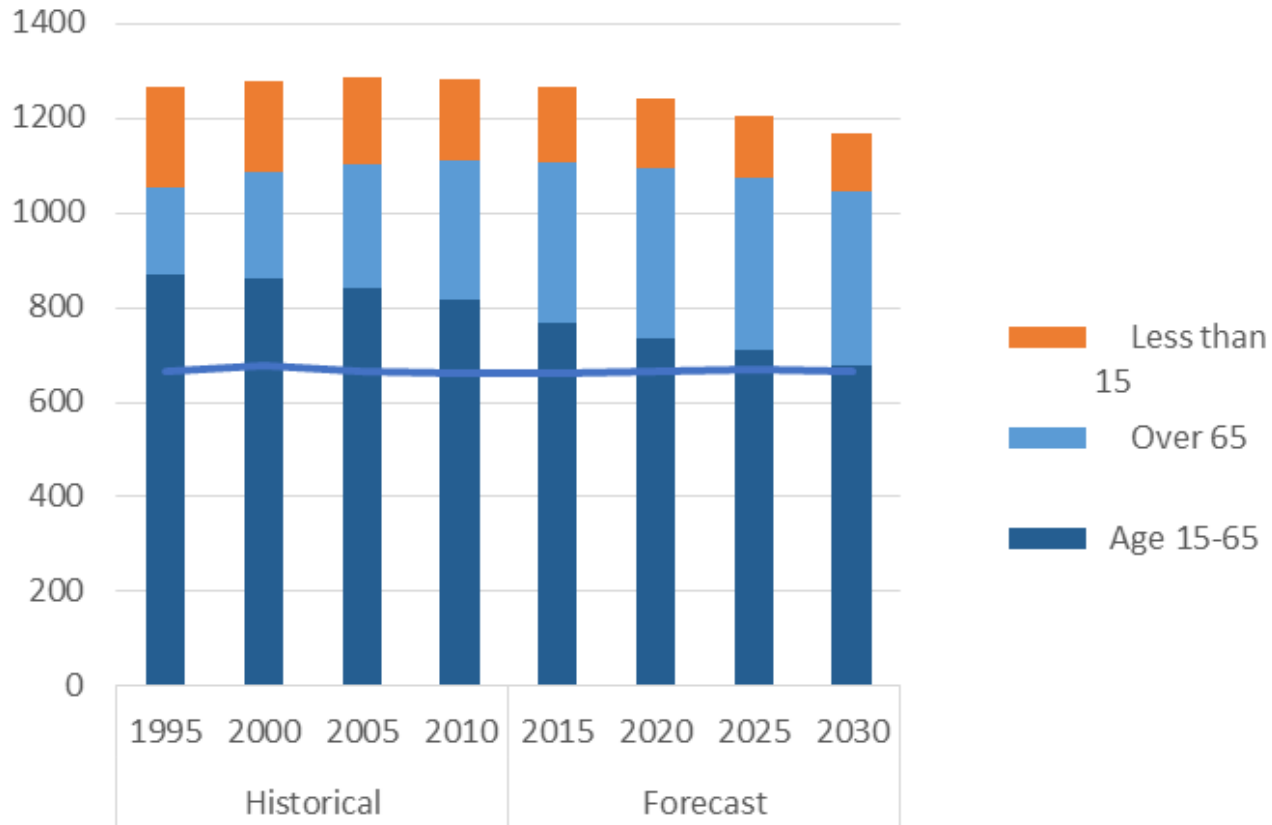
- * Based on IO tables from 1995 to 2013 in 2011 prices (85 sectors).
- * Employment for 23 sectors.
- * Investment by industry is distributed to commodities using a capital matrix.
- * The accountant includes full SNA accounts, related to the IO structure.

* **Jidea 9**

- * Population forecast with medium mortality assumption. Significant increase in labor force participation (59.3% in 2013 to 63.5% in 2030).
- * 2 percent annual increase in fossil fuel price.
- * World import demand is taken from BTM.
- * Programmed increase of consumer tax in 2014 (5% to 8%) and 2019 (8% to 10%) are included.
- * Additional government investment and consumption for East Japan earthquake is included

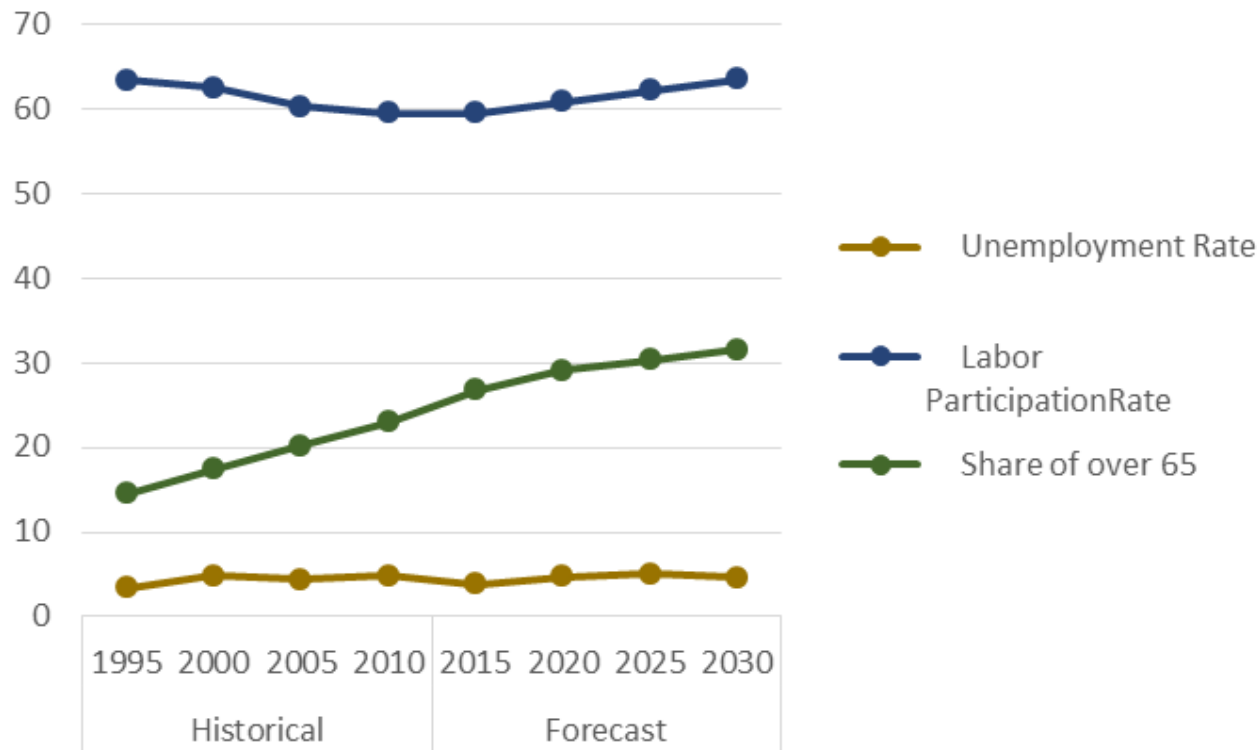
* **Baseline Assumptions**

Fig.1-1. Population (100 thousand)



* Demographic Projection

Fig.1-2. Unemployment Rate and Labor Participation Rate (%)



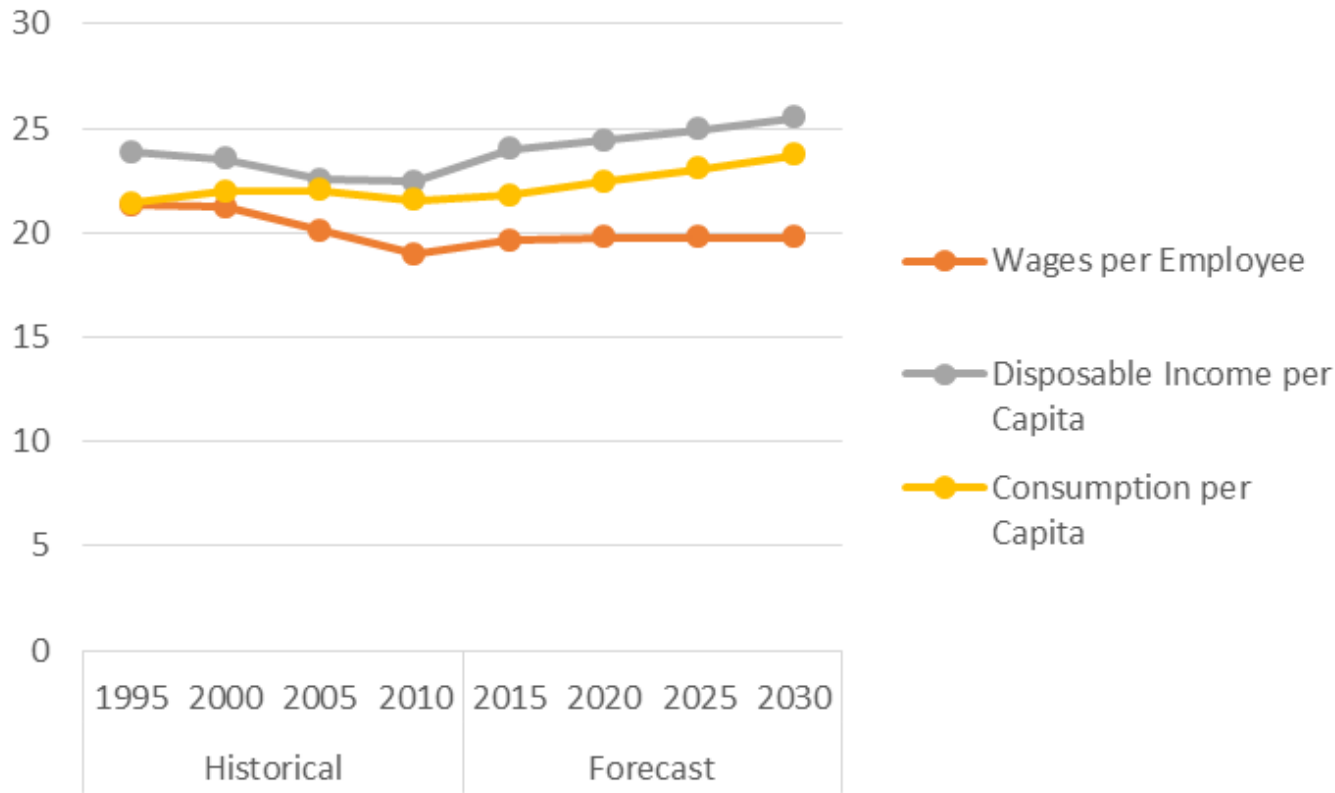
* Labor Market

Table 1-2. GDP by Expenditure (Unit; 2011 Price, Trillion Yen)

	Historical data				Forecast				2000~15	2015~30
	1995	2000	2005	2010	2015	2020	2025	2030	CAGR (%)	CAGR (%)
GDP	476.5	489.4	500.8	461.2	476.6	478.7	474.9	467.1	-0.18	-0.13
Total Expenditure	364.5	383.2	393.6	370.4	375.7	375.6	372.6	367.8	-0.13	-0.14
Outside Household	19.9	18.9	16.7	15.1	12.9	11.2	9.5	7.7	-2.49	-3.39
Household	271.0	281.2	283.5	276.3	275.8	278.6	278.3	276.5	-0.13	0.02
government	73.6	83.1	93.4	79.0	87.0	85.8	84.8	83.6	0.31	-0.26
Total Investment	137.2	127.3	116.3	96.8	112.8	116.5	115.7	112.7	-0.80	-0.01
Private Sector	94.4	89.8	89.5	74.7	85.6	84.7	81.5	76.6	-0.32	-0.74
Government	40.9	37.6	25.1	21.1	27.9	32.4	34.8	36.7	-1.98	1.85
Inventory Change	1.9	-0.2	1.7	1.1	-0.7	-0.7	-0.7	-0.7	10.4	0.0
Export	43.1	53.8	73.5	73.1	76.8	75.8	75.3	75.0	2.4	-0.2
Import	-68.3	-74.9	-82.5	-79.2	-88.8	-89.2	-88.6	-88.4	1.1	0.0
Trade Balance	-25.2	-21.1	-9.0	-6.1	-12.0	-13.5	-13.3	-13.4	n.a.	n.a.

 **Decreasing GDP**

Fig.1-3. Income per Capita and Consumption
(2011 Price, 100 thousand Yen)



* Income and Consumption

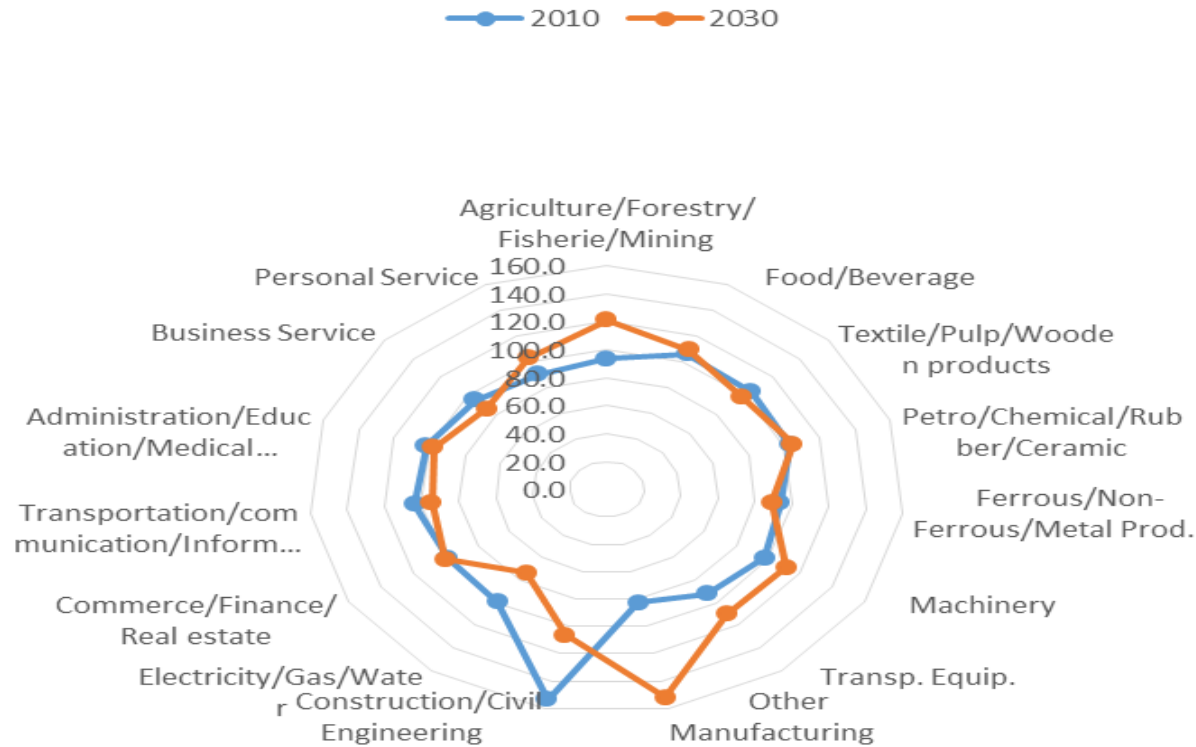
Table 1-5. Household Consumption

(Unit; 2011 Price, Trillion Yen)

	Historical				Forecast				2000~15	2015~30
	1995	2000	2005	2010	2015	2020	2025	2030	CAGR (%)	CAGR (%)
Total	271.0	281.2	283.5	276.3	275.8	278.6	278.3	276.5	-0.13	0.02
Agriculture/Forestry/Fisherie/Mining	4.1	3.7	3.7	3.7	3.0	2.8	2.7	2.6	-1.53	-0.93
Manufacturing total	73.4	70.0	67.0	64.5	61.9	62.9	62.9	62.4	-0.82	0.06
Food/Beverage	31.9	29.9	28.0	26.4	23.9	23.4	22.6	21.7	-1.49	-0.63
Textile/Pulp/Wooden products	7.1	6.4	4.6	3.7	3.7	3.6	3.4	3.3	-3.52	-0.87
Petro/Chemical/Rubber/Ceramic	11.4	11.9	11.4	10.7	9.3	9.2	8.9	8.6	-1.62	-0.54
Ferrous/Non-Ferrous/Metal Prod.	0.9	0.6	0.5	0.4	0.4	0.4	0.4	0.4	-2.92	0.45
Machinery	4.2	4.5	5.4	6.8	7.0	8.5	9.6	10.6	3.01	2.80
Transp. Equip.	5.8	4.7	5.5	4.8	7.0	7.0	6.9	6.8	2.68	-0.16
Other Manufacturing	3.9	3.3	2.9	2.2	2.3	2.6	2.7	2.8	-2.40	1.16
Construction/Civil Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.a.	n.a.
Electricity/Gas/Water	8.1	8.8	8.7	9.4	8.3	8.3	8.3	8.3	-0.37	0.03
Service Industry Total	193.6	207.5	212.9	208.1	211.0	212.8	212.7	211.5	0.11	0.02
Commerce/Finance/Real estate	107.4	111.2	115.2	112.5	116.0	116.8	116.8	116.2	0.28	0.02
Transportation/communication/Information	19.3	22.8	23.9	26.7	25.1	25.6	25.7	25.6	0.65	0.13
Administration/Education/Medical service	20.9	20.4	23.6	26.2	26.6	28.0	29.0	29.7	1.80	0.72
Business Service	3.3	4.3	4.0	4.6	4.0	3.9	3.9	3.8	-0.48	-0.19
Personal Service	42.7	48.9	46.1	38.0	39.3	38.5	37.4	36.1	-1.44	-0.57

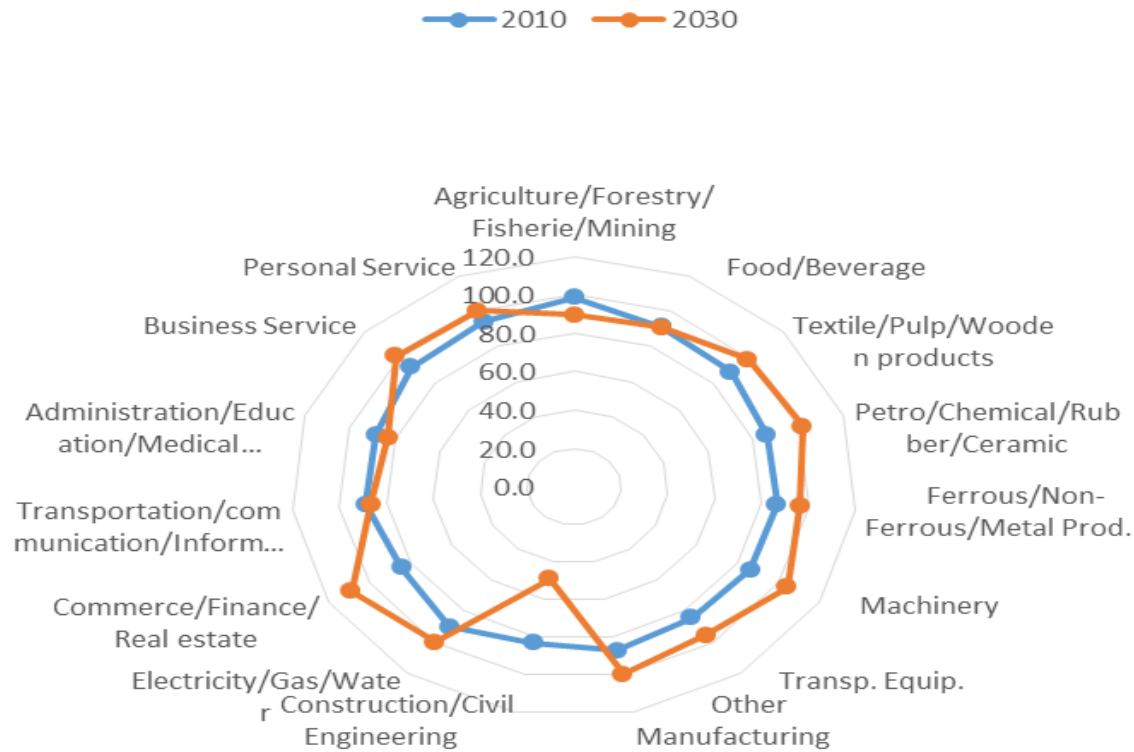
 **Consumption Detail**

Fig. 1-4. Labor Productivity Index (2015=100)



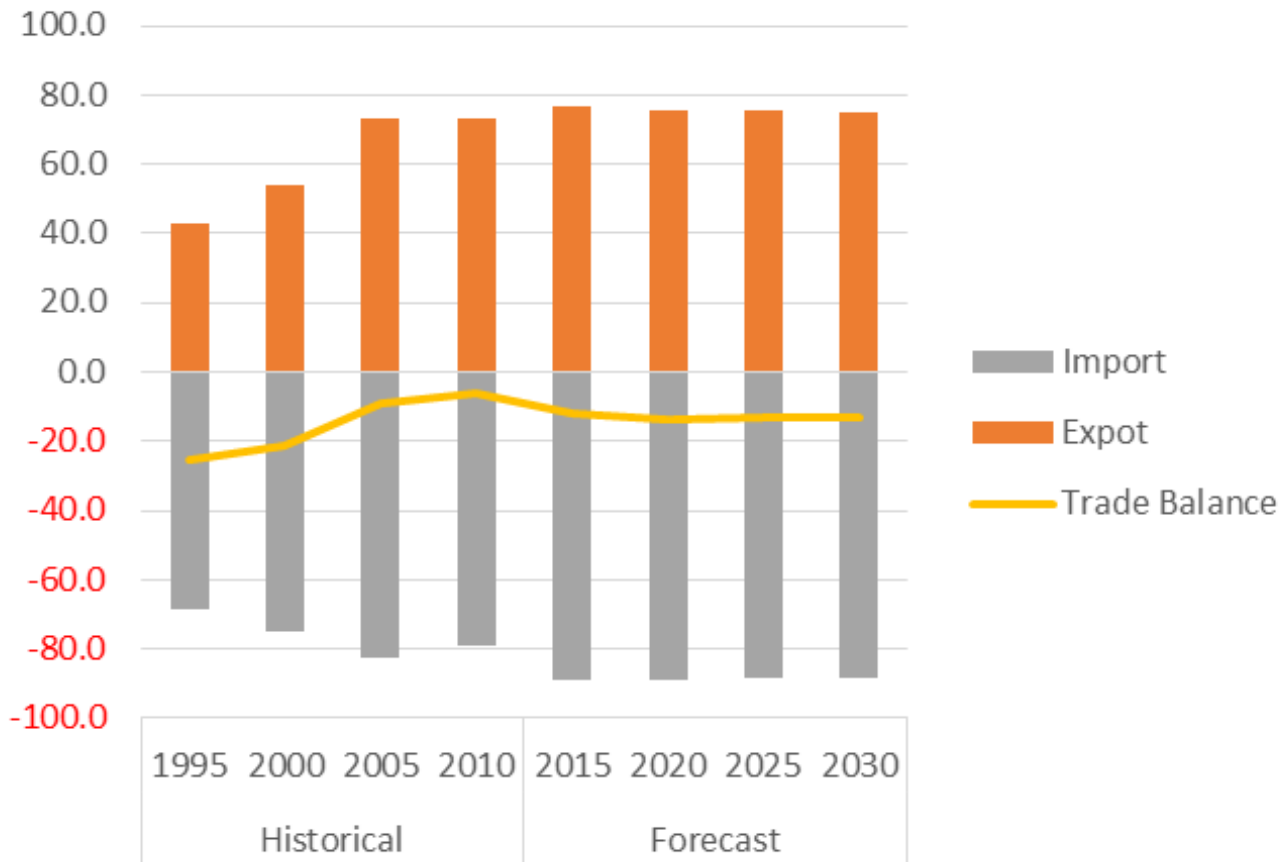
* Labor Productivity

Fig. 1-5. Private Investment Index (2015=100)



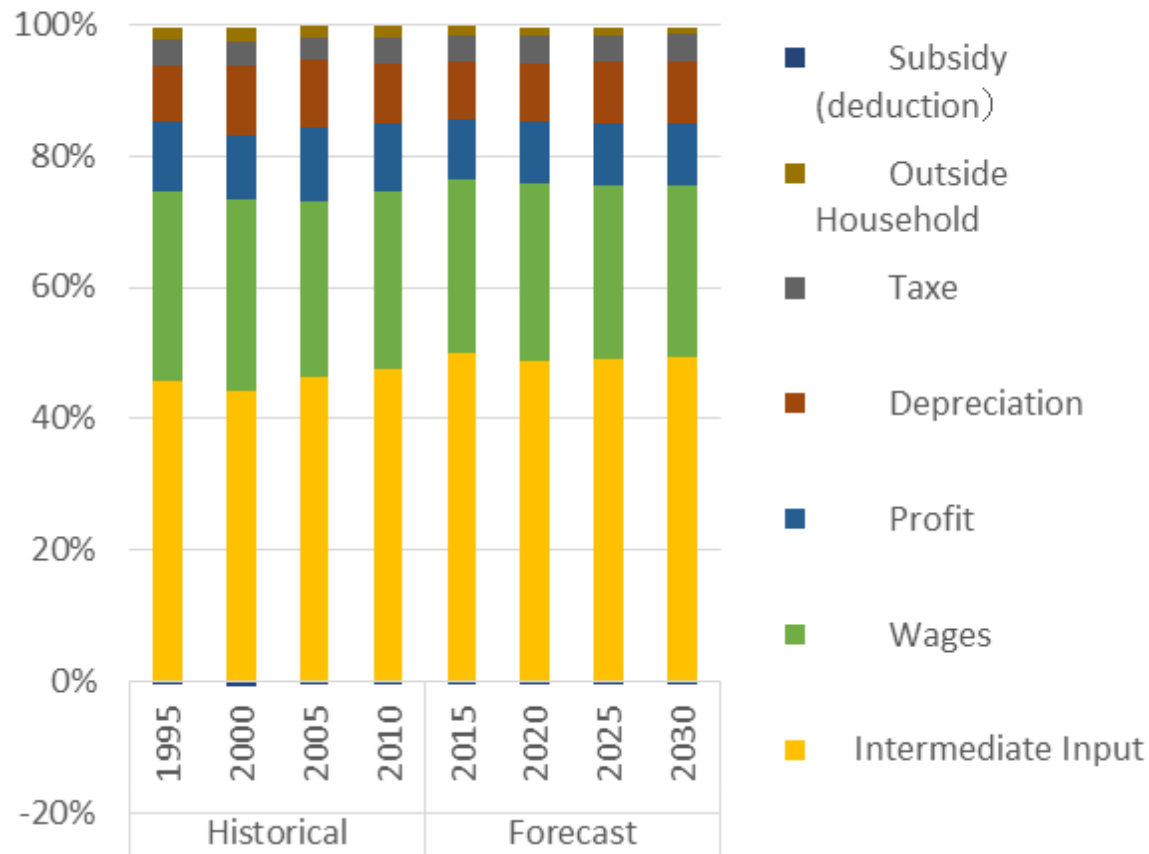
* Investment

Fig. 1-6 Trade Balance (2011 Price, Trillion Yen)



*Trade Balance

Fig. 2-1. The Structure of Input (%)



* Input Structure

- * More careful analysis of labor productivity growth - link R&D and investment to productivity.
- * Improve the profits equations.
- * Add a government finance and expenditures block.
- * Incorporate estimates of income from abroad.

*** Future Work**

***Thank you!**

For more information, see www.iti.or.jp/JIDEA-Model.pdf