

Technological Innovation and SMEs in Japan

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Debating Points:

Dual Structure and Differentials – Subcontracting System – Harmony and Co-existences vs. Mega Competition in The World Economy – SMEs=Vital Majority? – R&D – Socially Reasonable Division of Labor

1. Introduction: Changing Economic Environment Surrounding SMEs in Japan

The technology problem, especially its level of SMEs in Japan has been still very important and severer. In Japan, ‘The development of industrial structure was pushed forward, in the first place, aiming at quantitative expansion and enlargement of firm size, which have been making progress in both the heavy and chemical industry and light industry. Particularly through technological innovations, new industries such as petrochemicals and synthetic fibers, or machine and durable consumer-goods industries as automobiles and electric household appliances were created and rapidly developed’ ([1] p.93).

However, for technology or technical innovation, of course the other many factors, ‘The position of SMEs as a whole must be said harsh ones, getting severer in relation to large enterprises especially from the high-pitched growth period toward the structural depression at present’([1]p.94) since the so-called “The Collapse of Bubble”.

Then, In this time of severer economic environment surrounding SMEs, where should we seek the conditions of maintenance and development of SMEs?

Already Prof. Dr. Josef Mugler has raised question by fixing focus on such problems [2].

That is ‘How this organized and supported in Japan? Which public or private organizations offer technology transfer services for Japanese small firms? and how do they collaborate with small firms? and so on’.

Now, I would like to describe briefly how my country is organized for such these problems with recent “WHITE PAPERS ON SMEs IN JAPAN” and some cases.

Accordingly, I am in a hope that above-mentioned intention would, if, possible, lead to throw a fresh light and on a attaining a new recognition of what is essential for future survival task and related policies to promote the interest of SMEs and its management measures.

Fig.1. Changing Economic Environment and Small and Medium Industry

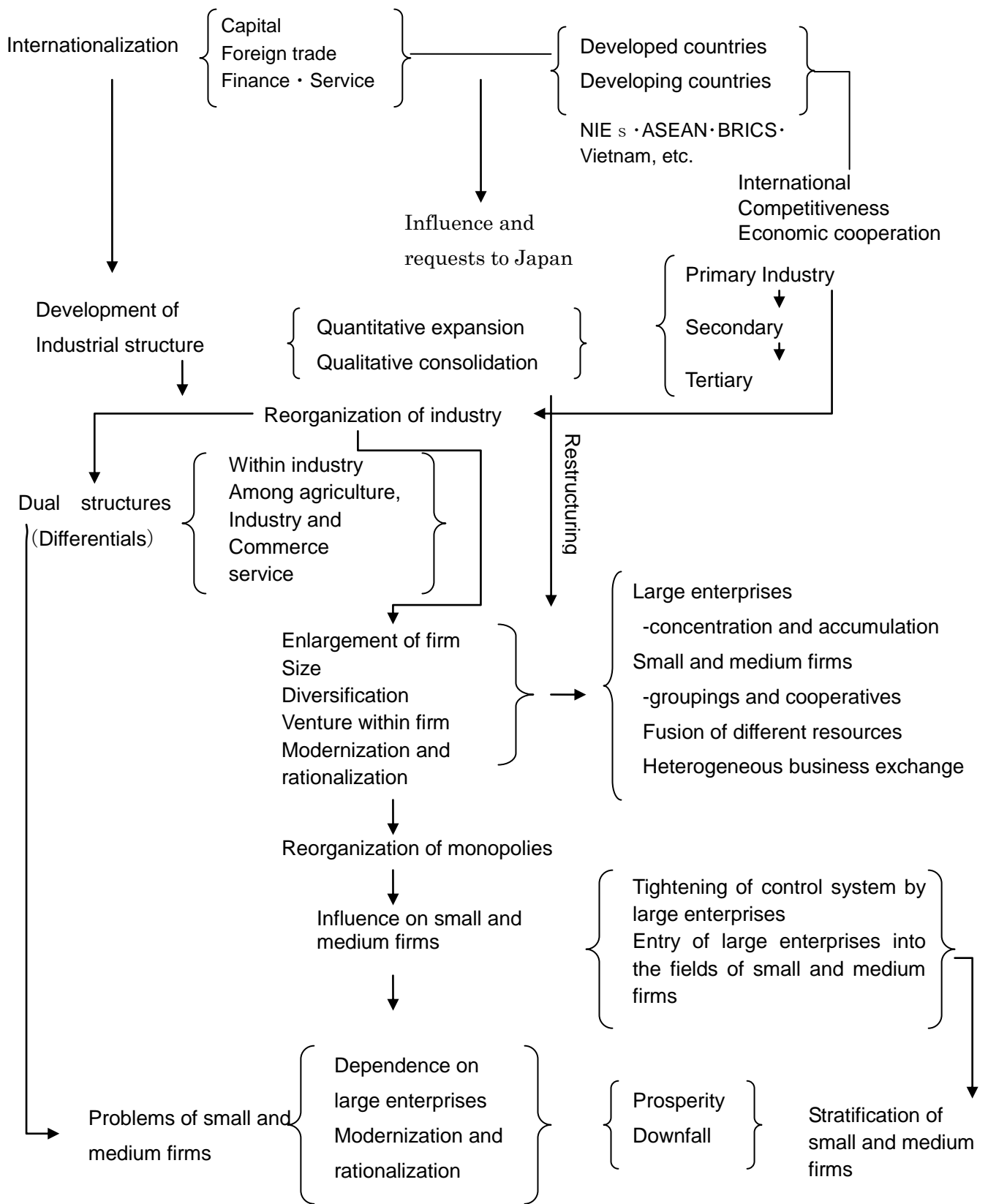
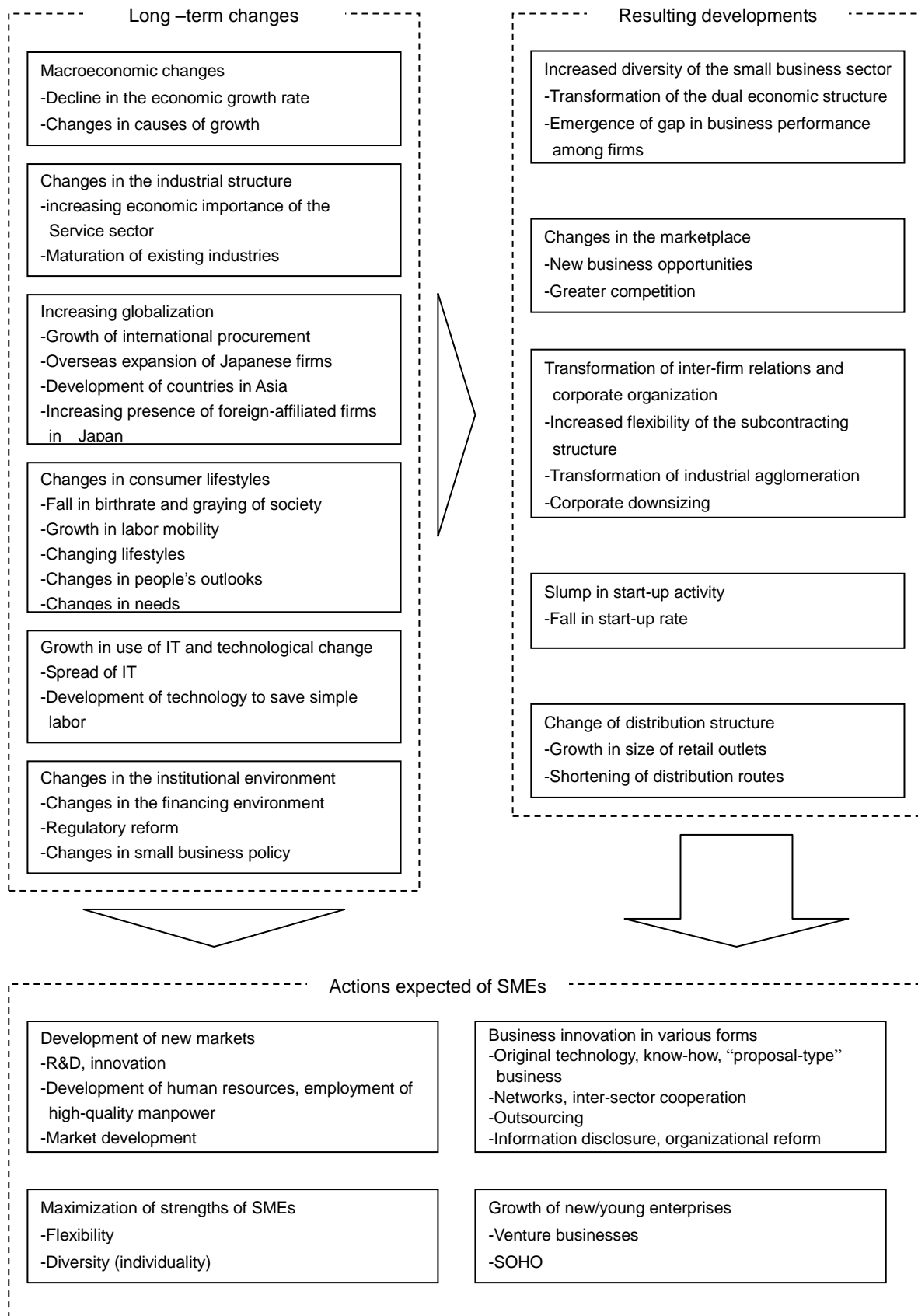


Fig.2. Changes in the business environment and the small business sector



Source: "WHITE PAPER ON SMALL AND MEDIUM ENTERPRISES IN JAPAN" 1999, p.5, Fig.1 • 1.

2. Present Situation of Technological Innovation with development of IT and Computization

In Japan, oligopolistic and gigantic computer manufacturing companies are competing with one another in trying to develop and sell their newer goods. So, “Computer Goods Market” in Japan bears some parallels to fresh fishes, meats and vegetables markets. Because former developed and manufactured computer goods have to fall into older and even rotten ones. They are short life (only few weeks ~few months) before their depreciation.

But, of course, we may say that this is very convenient chance as the so-called “Intermediate Technology Transfer” for SMEs.

Because SMEs may buy and introduce at a low price these battered-looking by large companies and /or former unsold ones to SMEs.

However, anyway very expensive investment for SMEs.

3. Recent Situation of SMEs Context with Globalization through “WHITE PAPER ON SMEs IN JAPAN” [3]

-Trends in market competition and technological superiority to East Asian products-

Trends by category of end product

The globalization of business affects not only those SMEs that themselves establish production operations overseas or enter foreign markets. It also affects enterprises that only have operations in Japan and target only the domestic market.

Thus enterprises that do business only in the domestic market can also be affected by globalization, regardless of the location of their manufacturing operations, if there is an influx of foreign products into the domestic market. Now that there are developing international division of labor, enterprises are having to think about their international competitiveness in East Asia when they do business even if they have no intention of expanding internationally.

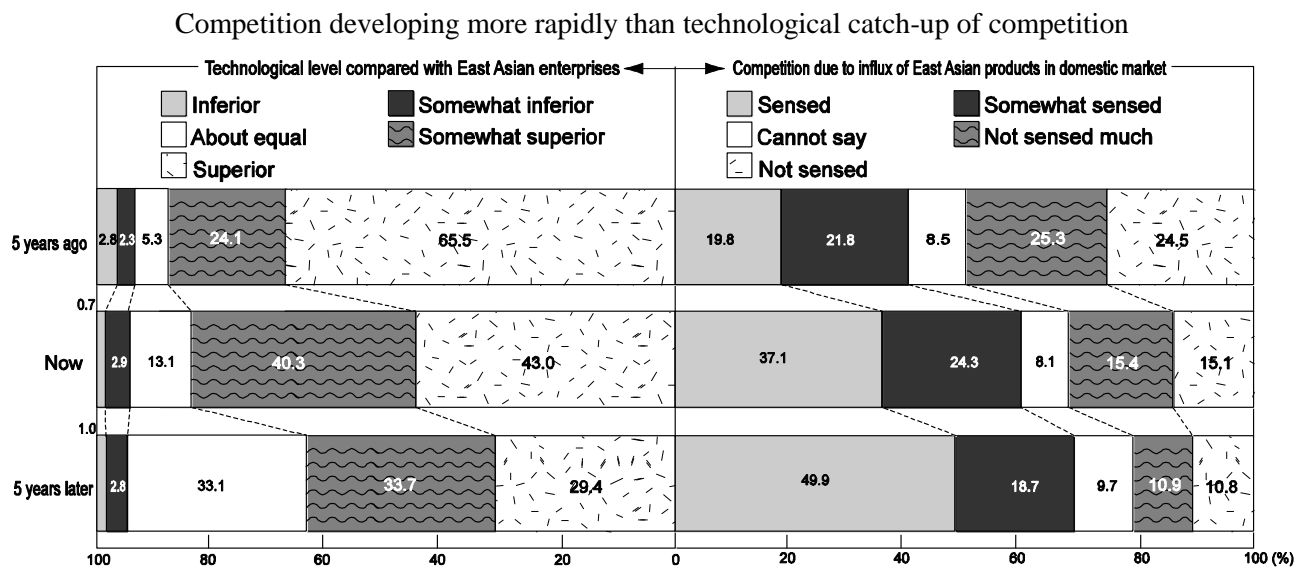
Trends among SMEs that were themselves establishing operations in East Asia were examined. But what of reverse developments, i.e., the state of competition with East Asian products in the domestic market? The proportion of enterprises that sense competition has increased dramatically in the past five years, and this trend is expected to continue to strength.

While there has thus been an increase in competition due to the influx into the domestic market of East Asian products, an examination of Japanese SMEs’ technological competitiveness compared with that of East Asian enterprises reveals that the proportion of enterprises that sense themselves to be technologically superior to East Asian enterprises has not changed much in the past five years indicating that the growth in market competition observed above is proceeding more rapidly than East Asian enterprises are catching up technologically. It would seem, therefore, market competition in Japan has revolved to date around price competition. Looking ahead, however, the existence of numerous enterprises that consider East Asian enterprises to be technologically on a par with themselves suggests that competition will grow fiercer.

If we look at the speed of market competition and technological catch-up by East Asian countries over the past five years broken down according to field of related end product, we find that there has been a rapid surge in market competition and technological catch-up over the past five years in the medical and welfare-related equipment field. This suggests that there was hardly any competition in this field five years ago, and that competition with East Asia in this field began to emerge in the past five years.

In the automobile and production facility fields, there appears to have been little technology catch-up, and market competition, too, has not intensified. While both product fields are characterized by a strong tendency to depend on local supporting industries (which means that there is little international trade in parts and intermediate products), these results also provide some indication of Japanese manufacturing’s strong competitiveness in the automobile sector.

Fig.3. Technological level compared with East Asian enterprises and state of competition due to influx of East Asian products in domestic market



Source: Mitsubishi UFJ Research and Consulting Co. Ltd., "A Questionnaire Survey of Recent Changes in Business Relations in Manufacturing" (November 2005).

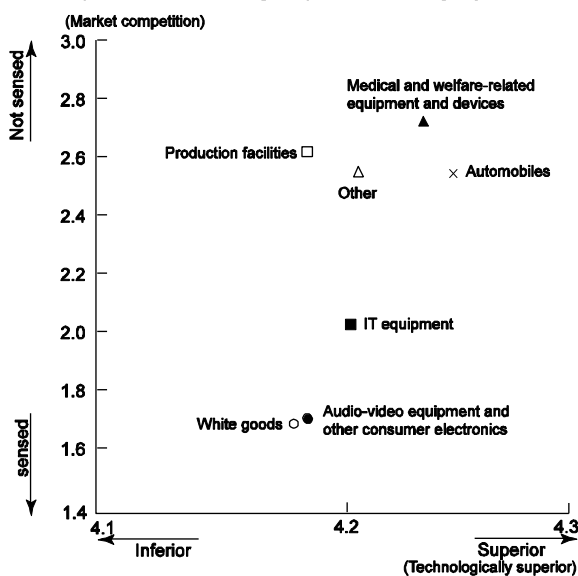
Note: Manufacturers and processors of parts, semi-finished products, and formed and fabricated materials with 300 or fewer workers.

(Small and Medium Enterprise Agency Ministry of Economy, Trade and Industry, Translated by Japan Small Business Research Institute "WHITE PAPER ON SMALL AND MEDIUM ENTERPRISES IN JAPAN" 2006,p117, Fig.2-3-15)

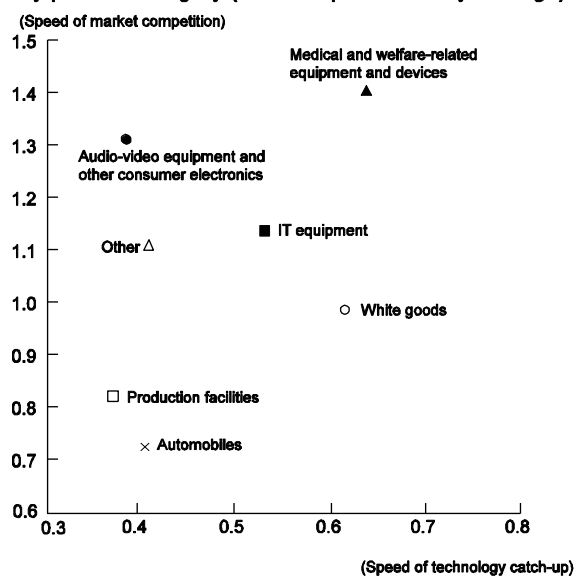
Fig.4. Technological superiority and state of market competition by product category

Conspicuous market competition in white goods, audio-video goods, and other consumer electronics. Whereas the white goods market was competitive five years ago, the markets for medical and welfare-related products, IT equipment, and audio-video equipment and other consumer electronics have grown more competitive in the past five years.

1) Technological superiority and state of market competition according to product category



2) Market competition and speed of technology catch-up by product category (now compared with 5 years ago)



Source: Mitsubishi UFJ Research and Consulting Co.,Ltd., "A Questionnaire Survey of Recent Changes in Business Relations in Manufacturing" (November 2005).

Note: 1.Manufacturers and processors of parts, semi-finished products, and formed and fabricated materials with 300 or fewer workers.

2.Regarding their core field of technology, enterprises were asked whether they presently sensed market competition due to the influx of East Asian products in the domestic market (5.No.4.Not much, 3.Neither, 2.Somewhat, 1.Yes)and whether they were technologically superior to East Asian enterprises(5.Superior, 4.Somewhat superior, 3.Neither, 2.Somewhat inferior, 1.Inferior). The values now were then deducted from those five years ago to obtain the "speed"

3.Regarding Fig.2),enterprises giving exactly the same responses five years ago and now that responded "1."or "5." were excluded from the calculations.

(Small and Medium Enterprise Agency Ministry of Economy, Trade and Industry, Translated by Japan Small Business Research Institute "WHITE PAPER ON SMALL AND MEDIUM ENTERPRISES IN JAPAN" 2006,p117, Fig.2-3-16)

There exists a dual structure in the die market. On the one hand, there is demand in the domestic market for high-performance dies requiring the use of new technologies and new materials, and high intangible value added through the ability to provide development proposals, and on the other, there exists demand for products that do not require such high performance, and for these enterprises are now turning to cheaper East Asian markets.

Competition with East Asian enterprises and the sources of Japanese manufacturing SMEs' competitiveness

Enterprises with a technological advantage over East Asian enterprises were examined to determine from which of the following three broad categories their superiority was derived: 1) the performance of the manufacturing equipment and machine tools that they used; 2) the skills of their employees; and 3) their ability to research and develop new technologies. An analysis of technological superiority and market competitiveness according to their responses revealed that enterprises whose superiority was derived from "ability to research and develop new technologies" were more likely than enterprises that derived their superiority from "performance of manufacturing equipment and machine tools" or "skills of workers" to maintain a high level of both technological superiority and market competitiveness.

If they are to continue competing with East Asian enterprises on an equal footing, then Japanese manufacturing SMEs will have to accept the fact that East Asia will draw closer and closer technologically as a result of the introduction of higher performance manufacturing equipment and the increasing experience of local workers. Ultimately, it is by constantly pursuing the "research and development of new technologies" by which Japanese manufacturing SMEs can best maintain their edge. In this regard, it is also important that stress be placed on developing employees' skills through the training of human resources with an eye on the future.

With enterprises finding it increasingly difficult to determine what direction technology development should take due to changes in transaction patterns, it will grow ever more important that development work should be directed toward applying limited business resources to enterprises' next moves and that action be taken to gather information to indicate what direction development should take.

After all, Japanese SMEs, if they are to maintain their superiority, not only continue with the business activities that they have pursued to date, but also tackle problems such as the question of how to further raise employee skill levels and ensure the smooth transition of skills to younger workers.

Naturally, the business interests of SMEs are diverse, and the changes in the transaction environment facing individual enterprises cannot be put down solely to the growing international development of labor. Moreover, the approaches that they should adopt also vary widely according to the specific trading conditions that they face. But while smaller enterprises in particular may be keenly aware of the need to embark on management reforms, such as by entering new fields of business, developing new products, and acquiring new customers, at this difficult time of dwindling orders and earnings, many enterprises can become absorbed in the present again when work picks up again—"danger past, God forgotten", one might say. Precisely because domestic investment in manufacturing is now heading up, all SMEs need to re-ascertain and reassess their strengths and weaknesses and do what they can in response on a constant and regular basis.

4. How Technology Transfer Organized and Supported for SMEs in Japan

1. Public Sector

1) SMEs Agency, MITI

“MEDIUM AND SMALL ENTERPRISES BASIC LAW” (July 20, 1963.)

CHAPTER II ADVANCEMENT. ETC. IN STRUCTURE OF MEDIUM AND SMALL ENTERPRISES

(Elevation of technology)

Article 10. The State shall, for the purpose of elevating technology of medium and small enterprises, provide the necessary enforcement policy for arrangement of experimental and laboratory organizations, promotion of research and development of technology, and expansion of undertakings in conjunction with technological guidance, training of technicians and cultivation of skilled workmen, etc.[4].

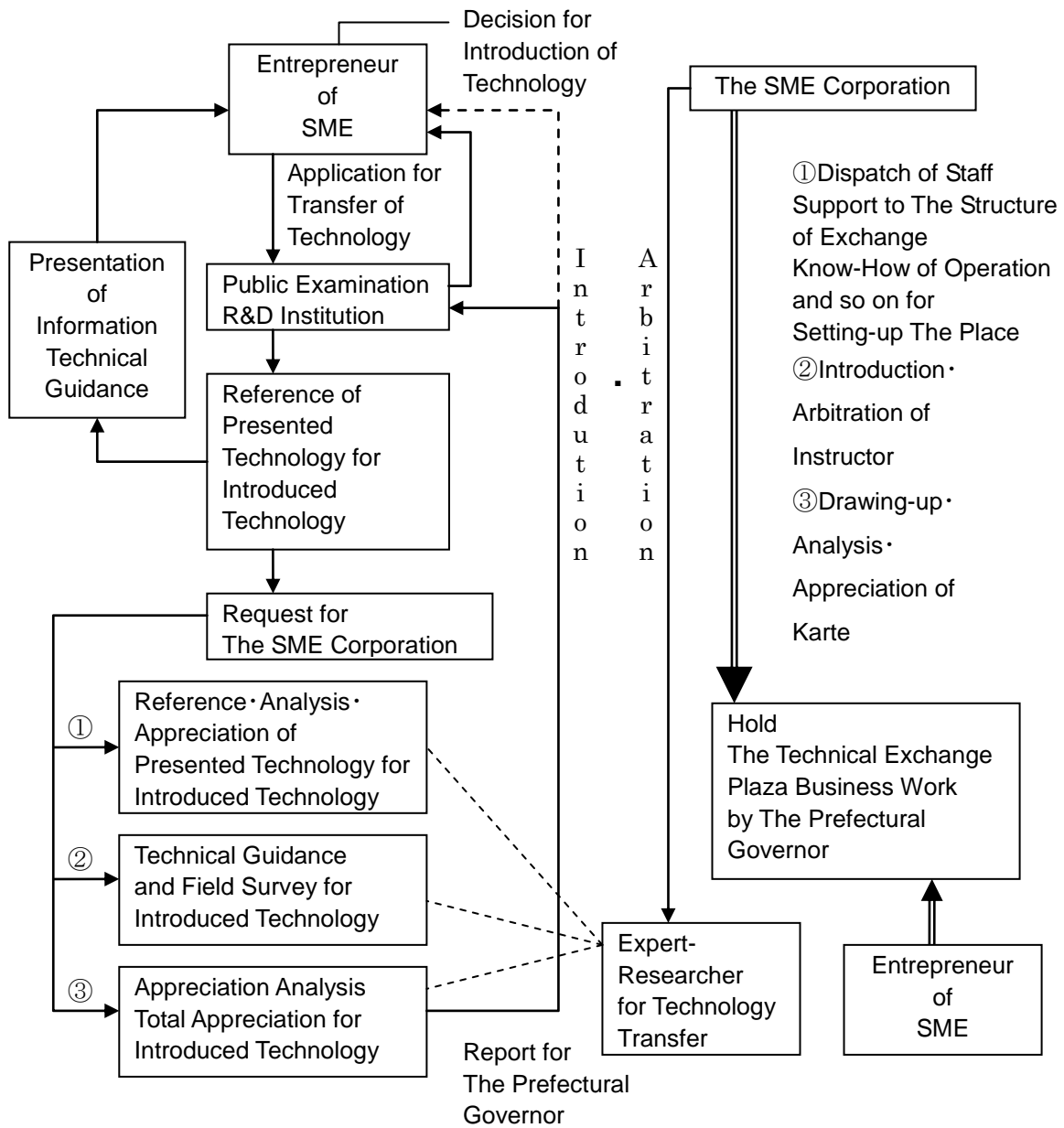
Upgrading Technology Coping with Informatization

The Government provides the following to improve the technical capabilities of SMEs

1. Technical training
2. Technical guidance
3. Technological development
4. To give assistance to exchange information
5. To give assistance to regional projects

(SMEs Agency, MITI “OUTLINE OF SMALL AND MEDIUM ENTERPRISES POLICIES OF THE JAPANESE GOVERNMENT”, March, 1991.) [5]

Fig.5. The structure of Measures to Promote Technology Transfer and Technological Exchange for SMEs in Japan (Plaza Business Work)



Source : Small and Medium Enterprises Agency, "OUTLINE OF SME POLICES", 1982.

Reference: Tsutomu Maotani 'SMEs and Technological Measures', Edited by Nobuharu Tatsumi·Junichi Yamamoto "RE-EXAMINATION OF SMEs POLICES-Drawing-up The Long-range Plan for Japanese Economy"(Yuhi-kaku), April,1985.(in Japanese)

2) Prefectural Government

Countermeasures to Promote and Develop for SMEs

- SMEs in Traditional Production Areas
- New Businesses

Foundation and Presentation of Facilities as “Techno-park” and “Incubator” for SMEs

2. *Private Sector-Private Industrial Side*

1) Subcontracting System

Recent “WHITE PAPER ON SMEs” (“W.P”) officially emphasized for subcontracting system. ‘The mutual cooperation between SMEs and Major corporations, as typically seen in the form of subcontracts among them, were of particular significance in moving toward a domestic demand-led economy in the late 1980 with relatively good results’ (“W.P.-1991”, p.34).

In the general meanings, ‘The system of subcontracted operation and supervisory control over all closely related enterprises coming to be reinforced owing to the said exploiting mechanism utilized by the monopolistic capital have come to give rise to the following structural differentiation such as (a) subcompany,(b) enterprise placed under direct supervisory control,(c) small business placed under exclusive subcontract,(d) small business placed under floating subcontract,(e) small-scale enterprise and/or petty enterprise (cottage industry) placed under floating re-subcontract’([6] p.110, [1] p.79).

From (a) to (c) are the so-called “Children Companies” for Major corporations as “Parent Companies”.

And also, this is “KEIRETSU”*,even notorious in “The Economic Negotiations between U.S. and Japan” and so on.

* Ken-ichi Miyashita • David Russell, “KEIRETSU Inside The Hidden Japanese Conglomerates A Revealing Looks at The Great Corporate Groups at The Heat of Japan’s Industrial Strength”, Mc Graw Hill, 1994.

However, ‘According to the Ministry of Foreign Affairs of Japan, “KEIRETSU” are business groupings which are based on capital investment, contractual relationship, or some combination of the two’ ([7]p.112).

Prof. Dr. Hans J. Pleitner who is the former president of “Rencontres de St. Gall”(The International Small Business Society in Switzerland) emphasized: Subcontracting relations in Japan compare with USA/Western Europe, it is Father and Son relationship. The father decides what is to be done. He does not let the son down.

However, neither is the son free to work for others, should he need to.

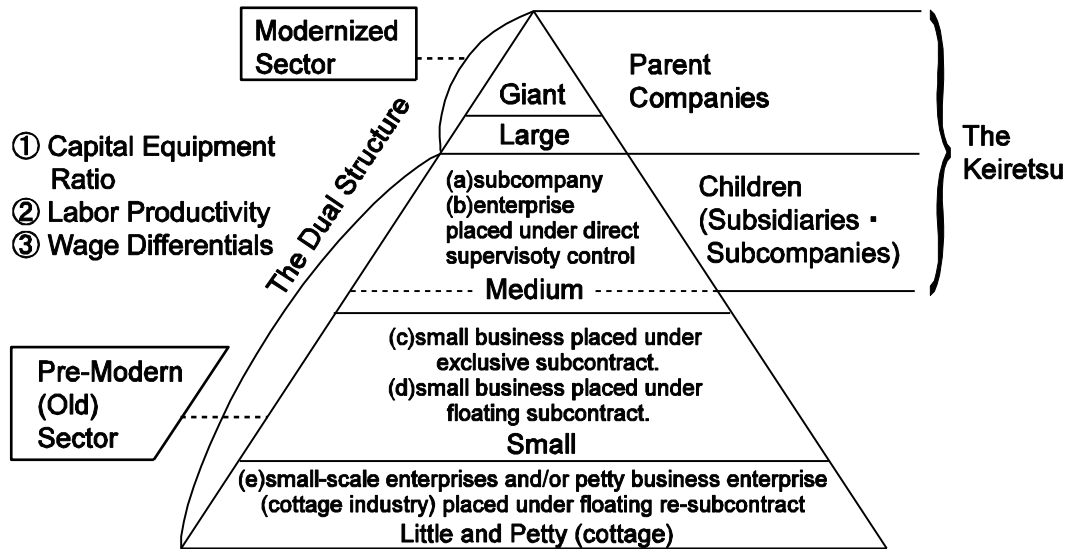
Altogether, this is not a question of “good” or “bad” –it is a question of adequacy or adequateness on different cultural/historical backgrounds([8]p.191).

Certainly, parent companies would like to help and take care of subsidiaries as their superior and obedient children companies.

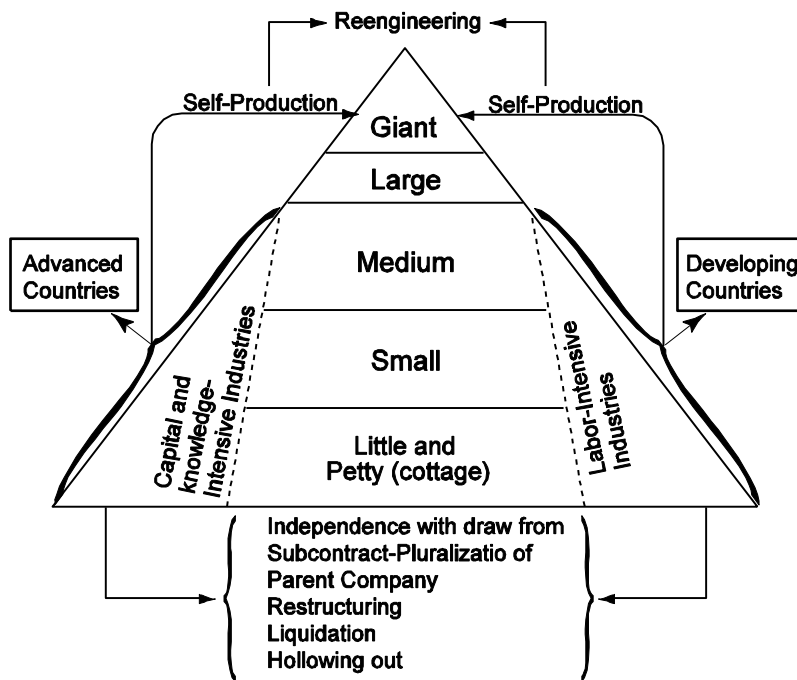
Even in this case, of course “The KANBAN System” and “The Just in Time” are very severer for SMEs-Subcontractors.

Fig.6. The Position and The Role of SMEs (Small and Medium-sized Enterprises)

1. The Dual Structure of Japanese Economy and The Position of SMEs(1960s)

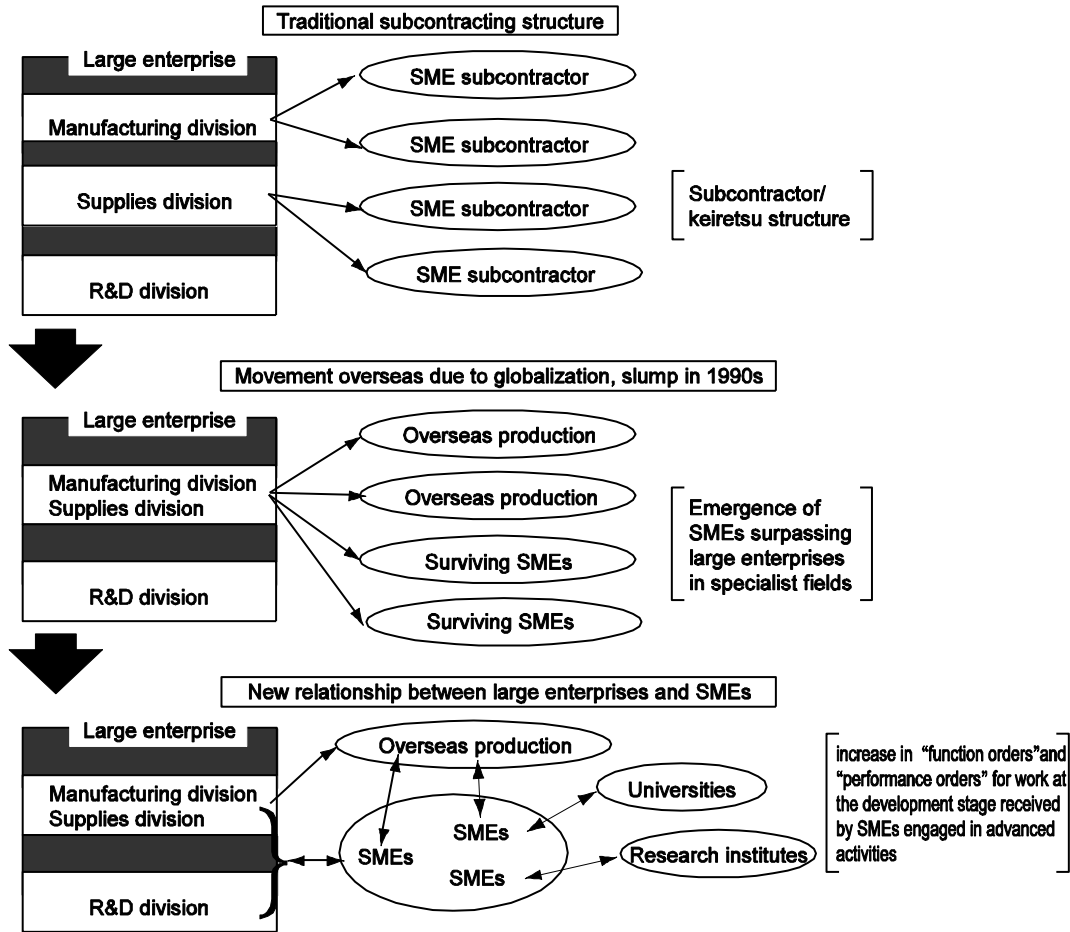


2. The Age of Development of Internationalization (Since 1980s)



Source : Illustrate based on Tatsumi Nobuharu, 'The Differentiated Structure of Small Business', "NEW MARXIAN ECONOMICS COURSE", Vol.4-"PRESENT CAPITALISM AND SOCIALISM" eds., by Shima Yasuhiko, Udaka Motosuke, Ohashi Takanori, & Usami Seijiro, January, 1973 (in Japanese), 'Automotive Parts · products...How to Ride out The Waves of Internationalization-Forming Acute Angle/Slim down of The Pyramidal/Hierarchical Type · Subcontracting Structure of The Automobile Industry', "SMALL BUSINESS FINANCE CORPORATION MONTHLY", 87'6, Management Soft Research, 1987, 6(in Japanese), Ota Shinichi, "THEORY OF CONTEMPORARY SMALL BUSINESS", Sci-Tech, March, 1993(in Japanese) and so on.

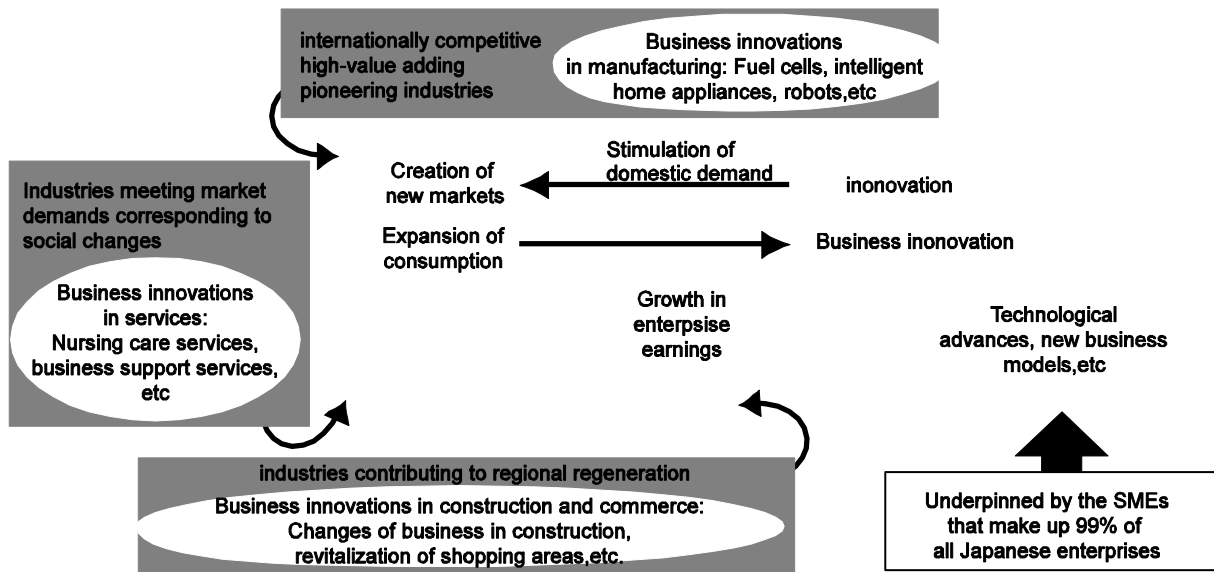
Fig.7 Changes in subcontracting structure



Source : SME Agency.

(SMALL AND MEDIUM ENTERPRISE AGENCY, METI, "WHITE PAPER ON SMALL AND MEDIUM ENTERPRISES IN JAPAN"2005, p.36, Fig.2-11.)

Fig.8. Relationship between the strategy for the creation of new industries and SME business innovation



Source :Compiled by the SME Agency from METI, "Creating innovation Based on the New industry Promotion Strategy"(2004).

(SMALL AND MEDIUM ENTERPRISE AGENCY, METI, "WHITE PAPER ON SMALL AND MEDIUM ENTERPRISES IN JAPAN"2005, p.33, Fig.2-1-4.)

2) Service Corporations, Organizations, etc. for Technological Information and so on

○,1. Japan Small and Medium Enterprise Management Consultants Association (J-SMECA)

- Created in 1954 under the auspices of the Ministry of International Trade and Industry(MITI)
- Membership Association of Small and Medium Enterprise Management consultants registered by MITI
- 6,000 over memberships

Background

J-SMECA, non-profit and membership association of MITI-registered small and medium enterprise management consultants(SMECs) created on the date of October 30, 1954, chartered and authorized by the Minister, MITI, Japan Government has provided a number of valuable services to the Small and Medium Enterprises(SMEs) community in co-operation with the Small and Medium Enterprise Agency (SMEA), MITI.

Since its inception in 1954, J-SMECA has steadily grown each year and has established an internal system of organization. J-SMECA membership of SMECs of over 6,000 has organized into 47 chapters nationwide.

○,2. The Japan Technomart Foundation

The Japan Technomart Foundation explains its system and activities to promote technology transfer, introducing 12 technologies consigned by its member companies.

Nomura Research Institute, Ltd. introduces seven technologies for which they have successfully intermediated for new businesses as a Technomart member.

Daiwa Institute of Research Ltd. introduces seven technologies owned by Nippon Telegraph and Telephone Corp. (NTT) in order to promote technology licensing.

Mitsubishi Electric Corp. introduced four of its own technologies, for which its Intellectual Property Licensing Dept. has promoted licensing.

3) Success and Development by Original R&D in SMEs for Technology

○,1. The Growth from SMEs

A. Marshall's "Movement Upward" Typical Examples

MATSUSITA ELECTRIC INDUSTRIAL = PANASONIC

HONDA · SONY

Recent Examples

CASIO · KYOCERA, etc.

Already, as "BUSINESS WEEK" emphasized, "Through innovative applications of semi-conductor chips, Casio transformed into itself from an "Obscure Maker" of bulky and expensive desk-top calculators into the world's largest producer of digital watches and handheld calculators' ([9] p.204, [1]p.240).

○,2. The Medium and Optimum Sized Enterprise=A. Marshall's "Representative Firm"

○,3. Venture Business=Elite of Small and Little Business

○,4. Spin off and Economic Independence from Parents Companies

5. Support for Manufacturing SMEs through “WHITE PAPER ON SMEs IN JAPAN” [3]

Section I Support for the advancement of core manufacturing technologies at SMEs

It is Japanese SMEs, whose excellent technologies play key roles in production, including casting, forging and plating, to work closely on the details with downstream companies in the course of developing and manufacturing products and parts, that allows Japanese manufacturing to be internationally competitive. In order to strengthen that competitiveness in manufacturing areas including fuel cells, robots and other high-tech industries that are taking the lead in the Japanese economy, as well as to foster creation of new industries, it is important to further enhance the competitiveness of SMEs with important core technologies. Those SMEs are, however, facing various difficulties, including changes in their business ties and connections as competition becomes more severe, greater risks in their technological development due to increased sophistication and specialization, difficulty in securing human and financial resources, etc. The bill for the SME Technological Advancement Law will therefore be submitted to the 164th ordinary session of the Diet, and strategic, prioritized measures will be undertaken, including promotion of information-sharing between upstream and downstream industries, support for research and development on core technologies, etc.

1. Support for research and development by manufacturing SMEs

- (1) Issuance of guidelines for technological advancement(guidelines specific to each technology) and recognition of R&D plans
- (2) Projects to support the advancement of strategic core technologies
- (3) Reduction and waiver of patent fees, etc.
- (4) Lending arrangements of JASME-Under the SME Technological Advancement Law, the Japan Finance Corporation for Small and Medium Enterprises(JASME) will provide special loans to SMEs whose specific research and development plans, etc., have been approve by the METI minister, and that meet certain requirements.
- (5) Special exemptions under Small and Medium Enterprise Credit Insurance Law
- (6) Special exemptions under the Small Business Investment Limited Law

2. Enhancement of the environment for advancement of manufacturing core technologies

- (1) Support for development of networks between upstream and downstream companies
- (2) Projects to support the advancement of strategic core technologies
- (3) Programs to develop human resources for SMEs, making use of technical colleges, etc.
- (4) Objective proof of technical accuracy and reliability in measurement standards
- (5) Facilitating continuation of core technologies
- (6) Programs to enlighten SMEs on intellectual property

Section 2 Promotion of technological innovation by SMEs

Motivated, capable SMEs play leading roles in Japanese manufacturing, and their revitalization is essential to overall economic revitalization and strengthening of international competitiveness. Accordingly, strong support will be provided for the development of technologies by SMEs boldly tackling new challenges and entering new business and fields, in order to foster large numbers of SMEs whose outstanding technologies will put them at global forefront in their fields.

1. Small Business Innovation Research(SBIR)
2. SMEs/venture challenge support
3. Promotion of commercialization of result of business innovation by SMEs

Section 3 Intellectual property measures for SMEs

1. Measures to protect SMEs' intellectual property rights
2. Support for the intellectual property strategies of local SMEs
 - (1) Support for development of intellectual property strategies
 - (2) Models for use of intellectual rights
3. SME/venture challenge support
4. Support for surveys of prior art for SMEs,etc.

Section 4 Promotion of collaboration among industry, universities and government

The development and commercialization of technologies through collaboration among industry, universities and government will be vigorously promoted through the following programs.

1. R&D by regional regeneration consortiums (SME category)
2. R&D on innovative SME technologies by the National Institute of Advanced Industrial Science and Technology
3. Subsidizing commercial R&D by University business start ups
4. University venture business support
5. Subsidizing costs of promotion of technology transfers from universities

6. Conclusion

With drastic and dynamic changing environment in contemporary world economic society, our studies, researches and investigations on SMEs problems have been widely and deeply enriching.

Such situation has a similarity in a sense to the case where the study about “physiocrats” is even in these days vigorously being made in the field of the history of economic doctrines or the history of economic thoughts. And as the matters now stand, we are placed under a situation as if the passage quoted by Dr. Masahiko Yokoyama once before— ‘as to “Physiocrats”, there are just as many different opinions as the number of students who are making study of it as committed by Henry Higgs’ [10] p.iv, [1] p.42,) –might just as well be applicable as it is, to the case of the present studies on SMEs problems above mentioned.

However, needless to say, our ultimate purpose is desirable and reasonable maintenance and development of SMEs!

Now, finally, the most basic and important part of the management efforts of SMEs should be focused on research and development, and to emphasized in particular, the development of human ability to cope effectively with any change in the economic environment. It must be also stressed that the policy for instruction and training should be reinforced to develop human ability along with the policy to protect, foster and assist SMEs, including a series of measures for improvement of their economic environment.

Construction of Equal and “Socially Reasonable Division of Labor”, Networking and Collaboration between SMEs and LEs!

If we are to ultimately aim at establishing a socially reasonable division of labor between SMEs and LEs (Large Enterprises), then we need to overcome the legitimized and unreasonable exploitation of SMEs as especially the so-called discriminated “minority industries” and their work force that have placed them at the bottom of the hierarchy of industrial structure. In order for SMEs to become a “Vital majority” in a real sense, the old system that places SMEs at the bottom of the hierarchy should be changed, and a new system that will generate centripetal and cycle effects and relationships should be constructed by placing SMEs in the centre([11], p.37~38).

Furthermore, what is the more important as another basic factor is not only corporate efforts of SMEs themselves, but also government policy to encourage them and the role of a leader or catalyst who makes a proposal to both of them from the international point of view.

In this meanings, Roles and Contributions for World Economy of “RENCONTRES de ST-GALL” are the Great and Forever!

I would like to conclude by citing again precious instruction from Prof. Dr. Alfred Guttersohn, Founder of “RENCONTRES de ST-GALL”, what is called for to solve the basic problem is ‘entrepreneurship and managing ability of SMEs which are confronted with drastically changing environment and changes in and diversification of values; and reeducation and training which have an accurate grasp of such motivation, concept and factors as enable them to maintain and develop their operations’ ([12],[1], p.34.).

Fig.9. Internal and External Impacts for SMEs

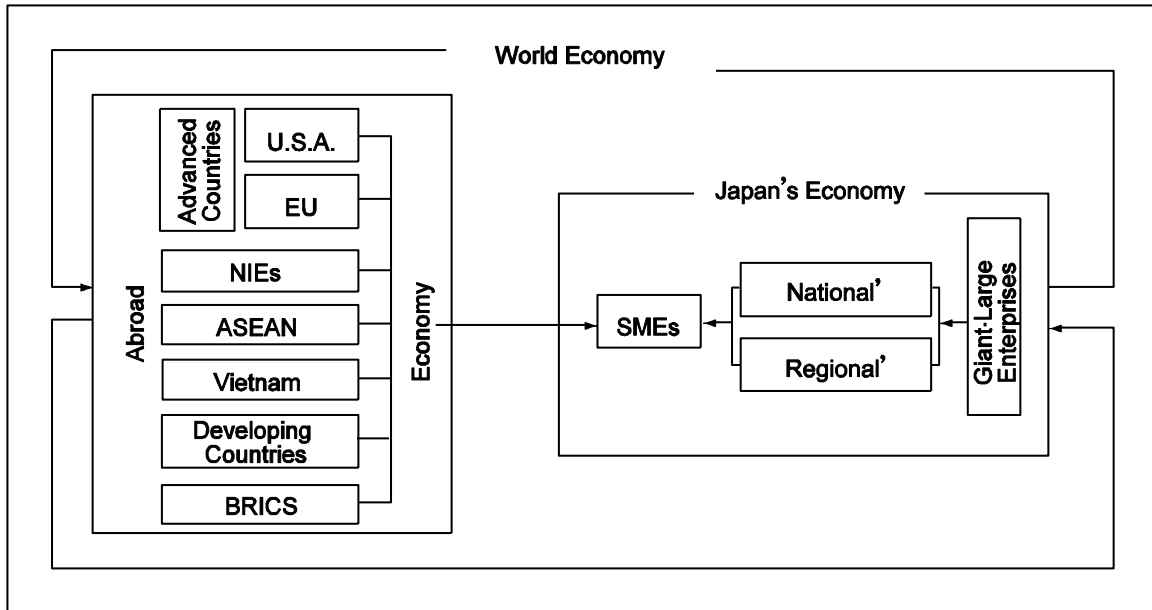


Fig.10. The Position and The Role of SMEs in The Age of "Glocalization" (Globalization and Localization)—Harmony and "Symbiosis"(Coexistence)

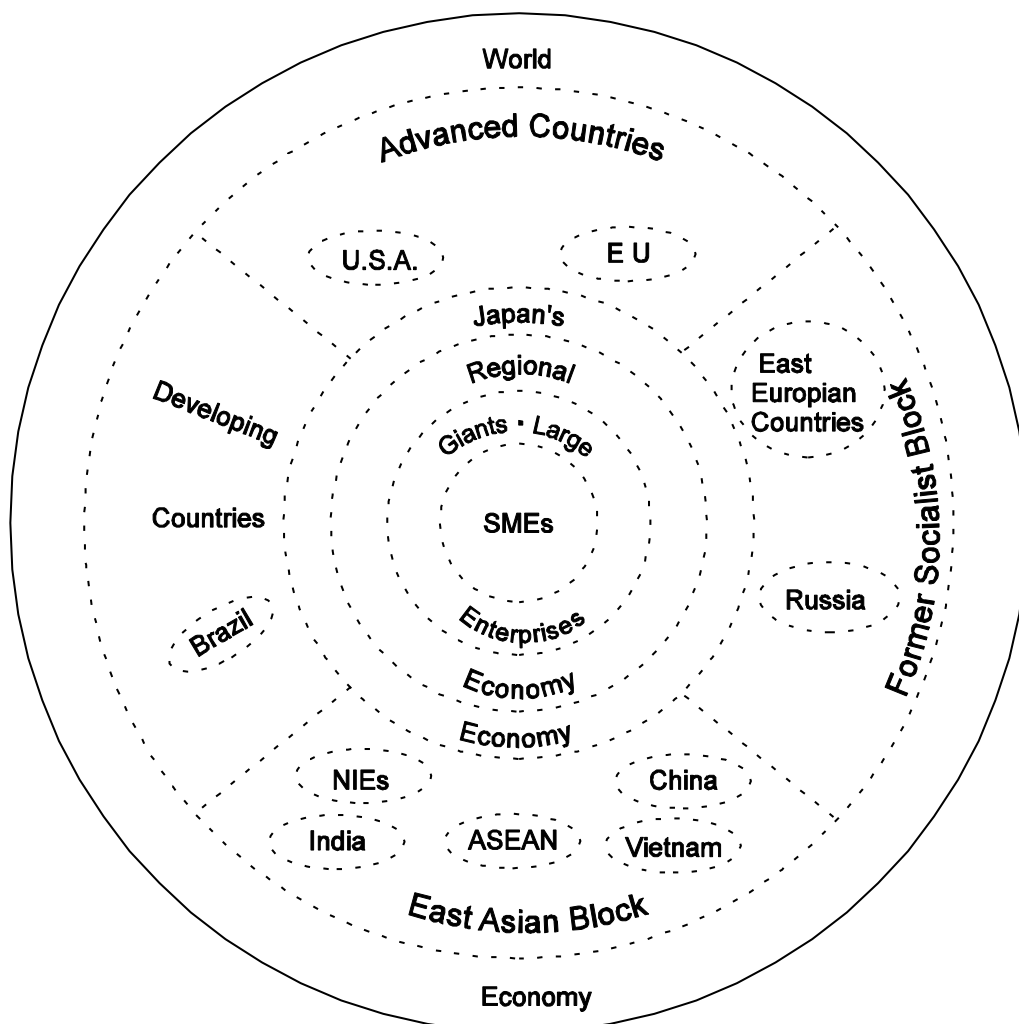
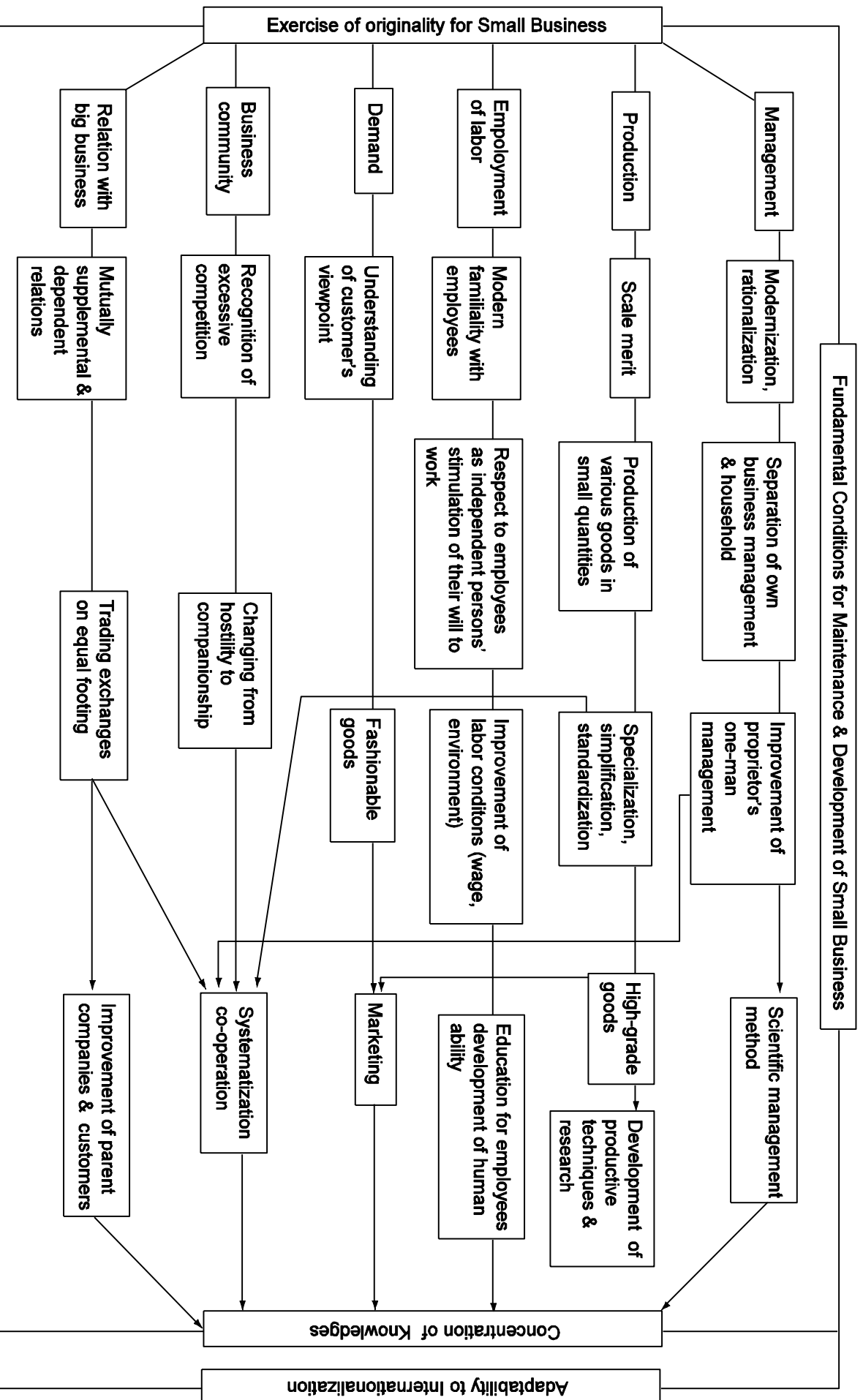


Fig.11. Fundamental Conditions for Maintenance & Development of Small Business



References

- [1] Mitsuru Tanaka, 'Economic Environment of Small and Medium Enterprises-Its adjustment, Correction and Policy', Osaka International training centre, Japan International Cooperation Agency, "EVOLUTION POLICY FOR CHANGING CONDITIONS OF SMALL AND MEDIUM ENTERPRISES IN JAPAN –in view of its possible application to developing countries-" (Translator, Shigeru Sugitani), January, 1979, Tanaka Mitsuru, (1999, November), "SMALL BUSINESS IN THE JAPANESE ECONOMY-The Position, The Role, The Present Conditions of Small Business and Future Directions, Notes and Materials-", Kansai University Press, pp. vi+272.(Chapter 3)
- [2] Prof. Dr. Josef Mugler, Director, Institute of Small Business Management, University of Economics, Vienna, AUSTRIA
- [3] Small and Medium Enterprise Agency Ministry of Economy, Trade and Industry, Translated by Japan Small Business Research Institute "WHITE PAPER ON SMALL AND MEDIUM ENTERPRISE IN JAPAN", October, 2006.
- [4] Small and Medium Enterprise Agency, MITI, "MEDIUM AND SMALL ENTERPRISES BASIC LAW", July 20, 1963.
- [5] Small and Medium Enterprises Agency, MITI, "OUTLINE OF SMALL AND MEDIUM ENTERPRISES POLICES OF THE JAPANESE GOVERNMENT", March, 1991.
- [6] Nobuharu Tatsumi, 'The Differential Structure of Small Business', New Marxian Economics Course, Vol.4-"PRESENT CAPITALISM AND SOCIALISM" eds. by Yasuhiko Shima, Motosuke Udaka, Takanori Ohashi & Seijiro Usami, January, 1973.(in Japanese), Mitsuru Tanaka 'The Recent Trend and Development of Theories of Small and Little Business in Japan', Kansai University, "KANSAI UNIVERSITY REVIEW OF ECONOMICS AND BUSINESS", Vol.4.December,1975(Chapter 2 in [1]),
- [7] Takarajima Editorial Department, "ENGLISH CONVERSATION FOR INMISUNDERSTANDING OF JAPAN", (A Separate Volume, "TAKARAJIMA EX"), June,1993.
- [8] Hans J. Pleitner, 'Small Business in Switzerland', The Faculty of Sociology at Kansai University, "BULLETIN OF SOCIOLOGY KANSAI UNIVERSITY", Vol.21, No.1,September,1989.
- [9] Ed. by Takeshi Hikino & Akira Nango, (December, 1982), "DICTIONARY OF JAPANESE BUSINESS CULTURE", (Chapter9 in [1])
- [10] Yokoyama, Masahiko, (April,1958.), "THE ANALYSIS OF THE PHYSIOCRACY"(in Japanese), 'The Recent Trend and Development of Theories of Small and Little Business In Japan' (Chapter 2 in [1])
- [11] Tanaka Mitsuru, (2004. July), "Small Business of Buraku in Japan's Economy-Industrial Economy and Human Rights-" Kansai University Press, pp. iv+74
- [12] Topic 5- 'Entrepreneur and Enterprise in The Face of Changing Values', Edited by Hans Jobst Pleitner, "SIGNIFICANCE AND SURVIVAL OF SMEs IN A DIFFERENT BUSINESS ENVIRONMENT", Swiss Research Institute of Small Business and Entrepreneurship, University of St. Gallen(HSG), September, 1996, 'Changing World and Small Business-Pressing Problems for Survival and Development in The Borderless Age-' (Chapter 1 in[1])