Industry Clusters and Transnational Networks: Japan’s New Directions in Regional Policy

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1. Introduction

Is neoliberalization the best way to characterize current trends in urban and regional policy in Japan? This paper addresses that question through an examination of Japan’s industry cluster policy and a case study of one cluster project in Sendai, Japan.

Neoliberalism is a political creed that celebrates the individual entrepreneur; advocates free markets in land, labor and money; and seeks to organize government and public policy on market principles. The neoliberal project gained impetus as a political response to economic crises in the 1970s: the breakdown of the international monetary regime, market saturation in the mass production industries, and fiscal contradictions in the Keynesian welfare state. The movement first took hold in the UK and USA, spread to other Anglophone nations and to Continental Europe, and then branched out to countries beyond the Western capitalist zone, largely through the agency of international institutions, like the IMF and the World Bank, working closely with Washington’s “Wall Street Dollar” regime (Gowan 1996).

Neoliberalism originated in the West as a critique of Keynesian liberalism. Both neo-and-Keynesian liberalism derive from classical economic liberalism. Japan has followed a different ideological course. As a late industrializing nation attempting to catch up with more advanced capitalist powers, Japan viewed economic liberalism as an ideological rationale for Western imperialism. The economic ideology that has guided Japanese industrialization is developmentalism: a political creed that celebrates collective mobilization and
advocates state managed markets in the national interest. The developmentalist creed explicitly rejects the self-regulating market ideal, and the noninterventionist state, calling instead for cooperative relations among government, business and labor within the framework of an activist, developmental state.¹

In thinking about the interplay between neoliberalism and developmentalism in Japan, three features of the neoliberalization process are worth bearing in mind.² First, neoliberalization is an uneven process. The scope and influence of the neoliberal project varies among countries, and among regions of the world. As Bob Jessop (2002: 457-458) has noted, neoliberal political projects can be ordered along a continuum that ranges from system transformation, as in the attempted shift from state socialism to market capitalism in East and Central Europe; to a regime shift within capitalism, as in the move from Keynesian liberalism to neoliberalism in the Anglophone countries; to a more limited set of policy adjustments geared to maintain a different kind of regime, as in the selective use of neoliberal policies to buttress otherwise Social Democratic regimes in Sweden and the Netherlands.

The various kinds of neoliberal projects—system transformation, regime change, policy adjustment—have different social implications and different records of success and failure. For example, neoliberal efforts at system transformation in East and Central Europe failed catastrophically, helping to instigate a form of predatory capitalism that makes a mockery of the market reform model. Only Anglophone countries have come close to instituting full
blooded neoliberal regimes. Elsewhere, neoliberalization has largely resulted in modifications to existing regimes.

Second, neoliberalization is a contingent process. The meaning of neoliberalization depends upon the institutional circumstances in which it occurs. A policy may look the same in two different institutional settings but have quite different implications in each. Of particular importance is the nature of the state that is implementing the policy reform.

For example, political decentralization is an important part of the neoliberal reform agenda. But political decentralization can mean something quite different in a unitary state, like Japan, than it does in a federalist state, like the United States. Japan’s unitary state takes an integrated approach to intergovernmental relations, emphasizes the benefits to be gained from central-local coordination, shares responsibilities and intertwines competencies among different levels of government (Hill and Fujita 2000). The U.S. federalist state, by contrast, takes a separation approach to intergovernmental relations, emphasizes the benefits of local autonomy, gives localities wide discretion over a specific range of functions, and touts the efficiencies to be gained from intergovernmental competition. Political decentralization in a federalist system, like the USA, fulfills neoliberal prescriptions for more autonomy and competition among local governments almost as a matter of course. Political devolution in a unitary state that places inherent institutional limits on local autonomy, as in Japan, unfolds within a still integrative national framework.
Third, neoliberalization is only one of several alternative restructuring paths nations are following as they attempt to work their way out of current accumulation and regulation dilemmas. The social democratic model continues to be a transnational alternative to neoliberalism in Western Europe (Crouch 2005; Hall and Soskice 2001). The aforementioned, predatory capitalism in East and Central Europe is another direction (Gustafson 1999). And contemporary variations on the developmental state indicate yet a third restructuring trajectory in East Asia (Schaede and Grimes 2003).³

2. Neoliberalism and Post-Developmentalism

As we shall see, Japan’s industrial cluster policy and the Sendai cluster project contain neoliberal elements. We believe the neoliberal aspects of the cluster policy and project are best thought of as adjustments to a still largely intact developmental state. We also believe that Japan is in the midst of a regime shift; but the trajectory is from developmentalism to post-developmentalism not to neoliberalism. We use the term “post-developmentalism” guardedly, both to highlight the continuity with past developmentalist traditions and institutions, and to indicate the emergence of new structures in Japan that conform neither to neoliberal nor to developmentalist models.

Developmentalism is a catching up ideology. Whereas neoliberalism claims a timeless and universal relevance, developmentalism demarcates a phase in a nation’s economic history. Developmentalism can be said to have ended in Japan, symbolically at least, with the Plaza Accord in 1985. At that
meeting of the G5 powers, Japan agreed to appreciate the value of the yen sharply against the dollar, so as to reduce her economic surplus and trade imbalance with the United States. The subsequent crisis, commencing in 1989 with the burst of the bubble caused by the inflated yen, propelled Japan into a decade of economic stagnation and self-reflection.

The wildly speculative and inflated bubble economy, and the long deflationary period following its collapse, catalyzed Japan’s transition to post-developmentalism. The bubble economy caused growing income inequality by class and region. The Mandarin bureaucratic elite became more susceptible to “rentier” influence. Urban residents suffered from bubble induced high land and housing prices. Following the burst of the bubble, slow economic growth raised unemployment rates and expanded the part-time and temporary labor force. Women demanded more differentiated and higher quality services attuned to their need to balance work and family responsibilities. Citizens became more concerned about social security and the environment. Out of touch with the multiple changes in progress, the conservative Liberal Democratic Party (LDP), having ruled Japan almost nonstop since the 1950s, fragmented and lost its hold on the electorate.

The state mounted a variety of inadequate and short lived efforts to boost the stagnant economy during the 1990s. Officials also began restructuring the institutional supports for the developmental state, including the policy making apparatus and system of intergovernmental relations. Policy making initiative shifted from LDP study groups and Ministry bureaucrats to the Prime Minister’s
Office. The principal mechanisms by which the developmental state marshaled funds for its industrial policies—the postal savings system and the Fiscal Loan and Investment Program—were partially dismantled. Decentralization in the fiscal and tax system is weakening another key developmentalist institution (See Table 1).

Yet, core elements of developmentalism and the developmental state continue unchanged. Although national economic priorities have shifted from catching up through high savings, investment and growth to global leadership via innovation and a high quality of life, Japan’s economic ideology is still rooted in nationalism. The political-economic elite are less cohesive and the Liberal Democratic party is more fragmented but the two still combine to dominate Japan’s political landscape. State ministries still guide relations between the public and private sectors in line with national plans and policies. The state still targets strategic industries and uses market incentives to guide economic behavior with dynamic comparative advantage in mind. In short, there is little indication the post-developmental state’s guidance and regulatory capacities are hollowing out (Fujita 2003).

3. Japan’s Industry Cluster Policy

*National policy framework.* The industry cluster policy is the Japanese government’s most ambitious regional development program since the new industrial city plan of the 1960s (Inoue 2003). The cluster policy has three specific goals: (1) to create an environment for business networking that
stimulates “continuous innovation”; (2) to foster new businesses in fields the
government considers to be of strategic importance to Japan’s economic future;
and (3) to achieve synergies between national industrial policies and efforts by
cities and prefectures to promote local industries. The state is using market
incentives to foster collaborative networks among businesses, local
governments, universities and NGOs within a unified national development
framework and with an eye to international competitive advantage.

The industry cluster scheme coordinates industrial policy with policies to
advance science and technology, spur regional revitalization, and sustain
competitive advantage in international markets. Industry promotion is combined
with science and technology policies in four broad fields: information and
telecommunications; medical and life sciences; health, welfare and the
environment; and nanotechnology and materials (Council on Science and
Technology Policy 2001; 2006).

Industry clusters implement these policies at the regional and local level. The cluster policy emphasis on local economic
development also accords with city and prefectural demands for greater
autonomy from the central state.

Local governments as central actors. The industry cluster plan continues
a “post-developmentalist” trend in regional policies that dates from the mid-1980s
(see Table 2). Following World War II, development policies focused on strategic
“catching up” industries, like steel, chemicals and machinery and their
agglomeration into urban and regional formations, as exemplified by the New
Industrial Cities program in the 1960s. Growth in jobs and income was the main
industrial policy aim. After the initial high growth period (1950s-1960s), national policies to achieve greater equity in the regional distribution of employment focused on relocating industry from Japan’s three major metro areas to outlying zones through the use of tax subsidies and other kinds of market incentives.

[Table 2 About Here]

Japan’s regions have tended to function as economic appendages to the nation’s core metropolitan areas. Lower ranking cities in the urban hierarchy lack the government connected business groups and private investment in R&D characterizing those at the top, and especially Tokyo, the nation’s capital (Fujita and Hill 2005). In accord with the government’s industry decentralization policy, when new products and technologies proved successful in the big metropolitan markets, companies tended to turn higher volume and more standardized production over to plants located elsewhere in Japan. The trickle down strategy balanced regional growth reasonably well from the 1960s through the 1980s.

But when the steep rise in the yen generated by the 1985 Plaza Accord threatened to price Japanese exports out of the international market, many corporations were forced to relocate routine manufacturing to lower cost sites in Southeast Asia and China. The policy of relocating manufacturing inside of Japan to even out regional growth was no longer viable (MLIT 2006: ch. 1). The rapid rise in the yen also caused a financial bubble. And when the bubble burst in 1989, new business start ups plummeted, further aggravating the plight of Japan’s most vulnerable regions and localities.
Japan began to redirect its regional policies during the 1980s: instead of extending routine manufacturing operations from the three core urban areas to outlying regions, the government started to build and diffuse institutional mechanisms for local innovation. The initial policies--the Technopolis Plan, Science Research Parks, and Science Cities—were the forerunners to today's industrial clusters. Funding for the new industrial and regional policies continued to come from the centralized finance and tax system and from public policy corporations acting as the “arms and legs of the state” (Okimoto 1989).

Government planners now advocate "self-generated" regional development, seeing this strategy as necessitated by the emergence of a "new value creation economy" (METI 2004: 172ff.). In their view, global production has saturated world markets. To create demand, companies must continuously differentiate their products and services. Continuous product differentiation requires continuous learning. Knowledge becomes the critical factor of production and the impetus to new value creation. Japan's less innovative regions are the most vulnerable to global competition. By developing the capacity to identify and draw upon their own locality-specific strengths, and aided by central government investment in local intellectual infrastructure, localities can become economically resilient in spite of the overseas movement of routine manufacturing and many service operations (Tsukamoto 2004).

The industry cluster plan indicates Japan's continued transition toward a post-developmentalist regime. Decision-making and funding for the industry cluster policy are more decentralized, collaborative and diffused among multiple
actors inside and outside of government than earlier regional plans, and the central state is playing a less directive and more coordinative role. The goal is continuous innovation, facilitated by a policy environment that encourages strategic scientific and technological research, and organized through open networks among small and medium sized businesses, governments, universities, and NGOs. In addition to manufacturing, the post-developmental state is emphasizing service economy clusters, in areas like health and the environment, which will upgrade the quality of life of the average citizen. Promoting quality of life services will also stimulate manufacturing, it is believed, as new machines and equipment will be required to meet new service needs (Fujita and Hill 2007).

Institutional continuity. The industry cluster plan is embedded in the same institutional framework as past regional policies. The Ministry of Economy, Trade and Industry (METI) spent nearly a decade planning the cluster policy before it was enacted as a national plan in 2001. The Regional Industrial Policy Group in METI did background research on industry clusters in Japan and overseas, it consulted with experts, and it held symposia to discuss the policy issues (Ibata-Arens 2004). This is the way METI has gone about formulating industrial and regional policies for over half a century (Okimoto 1989).

METI’s central office coordinates the national industrial cluster policy. Ten METI regional offices are responsible for implementing the cluster projects in their respective territories. The regional METI bureaus performed the initial ground breaking work. They surveyed their regional economies to assess the local networking potential among governments, businesses, universities, public
research institutions and financial institutions. They met individually with potential participants. They brought representatives from local governments, businesses, universities and NGOs together to create the initial cluster networks. And, in collaboration with local and prefectural governments, they established the cluster promotion organizations (CPOs) responsible for managing each industry cluster (Industry Cluster Study Group 2005) (See Figure 1).

Seventeen industrial cluster projects and eighty-one CPOs were operating in 2007. As defined by METI, CPOs are non-profit organizations that promote local networking among businesses, universities, public research institutes, local governments, NGOs, and trading companies. To help stimulate innovation and new business start ups, CPOs put together R&D consortiums among local governments, universities and firms, and they broker venture capital loans to small businesses entering into new fields. CPOs also help integrate industry cluster operations with parallel activities run by other national Ministries, regional, and local governments. CPOs run business incubation facilities in cooperation with local branches of METI’s Small and Medium Sized Enterprise Agency. CPOs help cluster participants find marketing outlets for new products in cooperation with trading companies. And they manage the Finance Service Agency’s loan system for industrial cluster activities.

The Finance Services Agency (FSA), attached to the Prime Minister’s Office, coordinates financial support for METI’s industry cluster plan. The FSA, along with its 11 regional bureaus, has established a loan system to support
cluster projects, and it holds “Industry Cluster Support Finance Conferences” that bring together banks and other financial institutions to raise funds for cluster participants (Industry Cluster Project 2007). The Small and Medium Sized Enterprise Promotion Corporation contributes to the industry cluster plan by working on university-business linkages and “fusion” linkages among businesses in different industries, practices it carries over from earlier industrial policies. And the government’s New Energy Development Organization (NEDO) and Industry Technology Research Center help support energy related activities in the industry clusters.

The industry cluster plan is a 10 year project but METI anticipates extending the policy for another ten years. The cluster plan is divided into two five year terms. METI evaluates the cluster projects at the end of each term and makes modifications in accord with the plan’s progress and with changing circumstances. The first term ended in 2005. METI reorganized the 19 clusters in the first term into 17 clusters for the second term beginning in 2006. The second term plan seeks the assistance of trading companies in the marketing of products from newly seeded cluster businesses. It also introduces a new method for policy evaluation and system management (METI 2006: 20).

The second term plan also gives greater emphasis to international cluster to cluster linkages and seeks to enhance the international “brand names” of Japan’s clusters. The Japan External Trade Organization (JETRO), which has offices all over the world, plays the central role in promoting cluster to cluster networks between Japan and other nations. The state is attempting to attract FDI
into the cluster projects, principally to stimulate new ideas and product innovations. A new law enables localities with industry cluster projects to turn to JETRO and to METI’s regional bureaus for legal, accounting, foreign language and other kinds of assistance in establishing relations with foreign firms.¹³

Implementation of the industry cluster policy has required changes in the rules governing relations between the state and business and between central and local governments. The issue has not been the reduction of regulations (“deregulation”) so much as it has been the reformulation of old rules and the creation of new ones (“reregulation”) (Vogel 1996). For example, in order for local governments to initiate cluster projects in the health and welfare services sector, the Ministry of Labor, Health and Welfare’s top down control over social welfare services had to be reduced. New legislation was also required to enable the creation of health and welfare related private businesses. The same held true for national universities wishing to establish research and commercial networks with local firms. Establishing tripartite networks among business, government and universities is a relatively new policy in Japan but networking between industry and government has a long history. Continuity also exists between the nationwide scope and 10 year duration of the industry cluster plan and Japan’s previous 10 year national land development plans. A similar thread can be drawn between the cluster plan and METI industrial policies going back over half century.
*Regional Inequality.* Has regional inequality increased in Japan since the government began redirecting regional policy from industry relocation to local innovation in the 1980s? Regional inequality, measured by the distribution of per capita income among Japan’s 47 prefectures, was relatively high during the era of rapid growth (1950s-1960s). As Figure 2 shows, there is a strong, positive, year-by-year correlation between regional income inequality and population increase in Japan’s 3 major metropolitan areas. And, as we have seen, the Japanese government reacted to that trend with policies to curb population migration to the major urban areas and relocate manufacturing and infrastructure investment to outlying regions. Regional inequality did drop considerably in the early 1970s and has stayed at that lower level over the past three decades.

[Figure 2 About Here]

There is, however, a widespread perception in Japan that regional inequality is growing. This perception was no doubt fueled by Prime Minister Koizumi’s (2001-2006) neoliberal campaign rhetoric and some like minded policies put into effect by his administration, including tax cuts on capital gains, privatization of postal services, and cut backs in public works spending. Still, the regional evidence does not yet support the perception of growing inequality. To the contrary, as shown in Table 3, the distribution of per capita income among Japan’s 47 prefectures actually became more equal between 1990 and 2003. The same downward trend in regional inequality holds for educational attainment, as measured by percent of the adult population completing high school and the percent graduating from universities and graduate schools (see Table 4).14
[Tables 3 & 4 About Here]

Japan’s industry cluster policy is less redistributive than past industry relocation and public construction programs; but like its predecessors, it spreads central government resources widely across the nation and it is sensitive to regional equity issues. It seems unlikely that the industry cluster policy, by itself, will widen regional inequality. That will depend more upon the current devolution of tax revenues and revenue generating responsibilities from central to local governments, and upon how effectively local governments can use their newly gained policy making powers and tax resources to compensate for the substantial reduction in central government public works spending, heretofore the prime redistributive mechanism of the developmental state.

In summary, the distinguishing features of Japan’s industry cluster policy number among the following. (1) Local governments take the initiative rather than individual entrepreneurs. (2) The cluster policy is state led and applies nation-wide. (3) There is a systematic effort to create local networks among universities, industries and governments in regions across the nation. (4) The bulk of the policy funding for the industry clusters comes from the central government. (5) The clusters range across a wide variety of industries. (6) The policy creates linkages between industry clusters and Japan’s multinational trading companies so that new cluster products can be placed in the world market. (7) There is a systematic effort to generate cluster to cluster linkages between Japan and other nations.

4. The Sendai-Finland Well Being Center
To achieve a more concrete understanding of Japan’s industry cluster policy, as it actually operates on the ground, we present a case study of a cluster project in Sendai, Japan: the Sendai-Finland Well Being Center.

Sendai, 300 kilometers north of Tokyo, has 1.2 million inhabitants and is the largest city in the Tohoku region. The central government’s Tohoku regional bureaus are concentrated in the city as are the region’s major universities, public research institutes, corporations, and NGOs. Nonetheless, Sendai's economy mainly depends upon the branch operations of Tokyo-based corporations. The city has been suffering from economic recession, and with the new fiscal decentralization policy, faces a long term reduction in revenues from the central government. Sendai is seeking foreign investment and is trying to spawn home grown industries to reinvigorate its economy and tax base.

In seeking to spur local development, the city can draw upon a menu of policy options provided by various Ministries and agencies in the central government (see Figure 3). Sendai houses the “Intelligent Cosmo Research Organization”, the CPO for the Tohoku Monozukuri (Manufacturing) project, one of METI’s 17 nationally designated industry clusters. Sendai has two main cluster projects. One focuses on advanced electronic machinery systems; the other on health, welfare and long term care services. Both are strategic industries targeted by METI’s industry cluster plan. The nucleus of the advanced electronic machinery cluster is the “MEMS” Park Consortium. Begun in 2004, MEMS Park brings together Tohoku University, Miyagi Prefecture, the Tohoku Economic Federation (a big business association), METI’s Tohoku bureau,
the Tohoku branch office of the Development Bank of Japan. The mayor of Sendai leads the consortium and the vice-governor of Miyagi Prefecture sits on the executive board.

[Figure 3 About Here]

Sendai’s second cluster focuses on medical and welfare services to support an aging society. The city has begun a five year Preventive Health Care Cluster project and has established a Consortium to promote innovative health care technologies. The aim is to develop and apply advanced information, media and electronic machine technologies for the provision of long term care of the elderly, at home and in institutions. Sendai’s mayor is also the titular head of this effort, Miyagi Prefecture is again involved, as is the Tohoku bureau of METI, universities and business associations (The City of Sendai 2007).

The Sendai-Finland Well Being Center (WBC) is the nucleus of the health and welfare cluster. The €30 million Finnish-Japanese joint venture introduces into Japanese nursing homes welfare concepts and health care equipment widely employed in Finland. For Finland, the Well Being Center (WBC) initiates a new export industry in a fast growing and potentially immense global market. For Japan, the WBC initiates a new type of elderly care business that the government anticipates will help older people live more independent lives. Drawing upon advanced information technologies, the Center offers long and short term care in-house as well as day care services to elderly living in the surrounding community.
The new value creation economy. The Finland Well Being Center (WBC) exemplifies METI’s concept of knowledge based competition in the world economy and value creation based upon intellectual assets (METI 2004). The WBC consists of a Care unit and an R&D unit. Residents are provided with nursing and preventive medical treatment in the Care unit. In the R&D unit, Finnish and Japanese researchers collaborate on new products and services, conference rooms and lounges promote exchanges between tenant companies and universities, and demonstration spaces showcase experiments. The two units are paired so that feedback from the Care unit can stimulate new ideas in the R&D unit and new products in the R&D unit can be tried out in the Care unit. In this way, project managers hope to seed businesses specializing in high value added medical equipment and services.

Finland’s most advanced information technologies are integrated into the Center’s rehabilitation, physiotherapy, dental, recreation, security and emergency services (Immanen-Poyry 2003). Physioacoustic methods treat muscle complaints. Orthotic systems ease foot problems. Ergonomic chairs facilitate dental care. Intelligent fitness equipment expands exercise opportunities. Multimedia digital networks facilitate in-house communication and provide entertainment. Surveillance technologies detect wandering patients and increase the safety of persons suffering from dementia. Health monitoring and house automation systems connect private residences to the Center enabling longer living at home. The staff must be carefully trained to ensure that the Center’s technologies are put to their full advantage.
Governance: networked cooperation among clusters. The Finland Well Being Center is a network type of direct foreign investment. The project interlinks different kinds of institutions at several geographic scales (see Figure 4).

International collaboration occurs among clusters of actors, not just companies. Collaboration among clusters is facilitated by quasi-governmental "networking" organizations. Government and nonprofits participate along with business enterprises. Parties to the network operate on many spatial levels: transnational, national, regional and local.

[Figure 4 About Here]

Transnational cluster to cluster collaboration. The WBC is collaboration between regional clusters in Oulu, Finland and Sendai, Japan. Oulu, with 123,274 inhabitants, is Finland's sixth largest city. The region is one of 22 government designated "Centers of Expertise." Oulu contains Finland's second largest university, many public and private research institutes, one of the world's most advanced telecommunications complexes, and a "well being" sector devoted to medical, biological and environmental technologies. A Technology Park oversees the Center of Expertise and encourages collaborative R&D to strengthen Oulu's global position in the information and well being industries. Over a dozen Oulu companies are participating in the Finland Well Being Center.

Like Oulu, Sendai is an academic center with many university-industry linkages in the applied sciences. Two Sendai universities play a central role in the Finland Well Being Center. Tohoku University has a fine medical school and top ranking research institutes in materials science, chemistry and physics.
The university’s "New Industry Creation Hatchery Center" encourages collaboration among its own R&D operations, central and local government, and private companies. Tohoku University researchers participate in the Well Being Center's R&D unit. Tohoku Fukushi University specializes in social welfare. The university's recently inaugurated Center for International Exchange collaborates on education for care givers with counterparts in Korea, China and Taiwan. A Tohoku Fukushi University based social welfare corporation manages the WBC's care unit.

Like Oulu, Sendai is promoting information technology industries. The city's "IT Avenue district" contains 140 enterprises with over 5,000 employees. The central government considers Sendai's IT complex a model and makes grants available for training and joint industry-university research. Sendai, also like Oulu, is a government targeted development zone for medical and environmental technologies.

**Quasi-governmental networking organizations.** Initiative for the WBC originally came from the Tokyo head of Finpro and the Director of the Finnish Institute in Japan. Finpro is an international consulting and trade association that helps Finnish enterprises enter into foreign markets. The Finnish Institute in Japan promotes cooperation between Finland and Japan in research, higher education and culture. The two were looking for a candidate city in Japan where Oulu medical technology companies could introduce a new export cluster. Finpro asked the Development Bank of Japan for assistance. The DBJ has extensive financial ties with cities and pinpointed Sendai as a suitable match with
interests in the Finnish proposal. The DBJ introduced the two parties and has supported the WBC ever since.

Finpro, the Finnish Institute of Japan, and the Development Bank of Japan are quasi-governmental, networking organizations that facilitate cooperative activity among public and private actors. Finpro operates Trade Centers in 40 nations, each staffed by Finnish and local experts, and its operations are heavily subsidized by the Finnish government. Along with business consulting and trade promotion, Finpro participates in new development projects that Finnish national planners consider significant for the country's industrial policy. Over 500 Finnish companies belong to Finpro as does the Confederation of Finnish Industry and Employers and the Finnish Entrepreneurs Organization.26

The Finnish Institute in Japan arranges scholarly visits, facilitates research and encourages knowledge exchange between experts in Finland and Japan. The Institute is supported by a Finnish foundation whose members represent the national government, cities, universities, business federations and companies. The Minister of Education and Minister of Culture serve on the foundation's supervisory board as do university representatives and the chief strategy officer for the private technology firm, Nokia Corporation.27

The Development Bank of Japan (DBJ) is a public policy corporation lodged in the Ministry of Finance where it provides long term finance for urban and regional and technology development, environmental preservation, energy and economic revitalization.28 Japanese public policy corporations are quasi-governmental nonprofit organizations that are created by the state outside its
formal structure to deliver government services under subcontract. They closely resemble government agencies because they are strictly regulated and Ministry officials choose who can qualify for nonprofit status (Estevez-Abe 2003). The Development Bank of Japan offers loans to encourage inward FDI and enters into partnerships with foreign companies. The DBJ has 18 regional offices in Japan and six branches overseas.

Global governance. The Finland Well Being Center is a decentralized and loosely integrated network among subunits of different national, regional and local governments, civic NGO's, and private firms (see Figure 4). Participants in the Well Being Center on the Finnish side include Finpro and the Finnish Institute of Japan, over a dozen Oulu companies, the National Technology Agency of Finland, the National Research and Development Centre for Welfare & Health, the Oulu Regional Center of Expertise, the University of Oulu, and the city of Oulu. Collaborators on the Japanese side include the Development Bank of Japan, Sendai information and medical technology firms, Tohoku University, Tohoku Fukushi University, Tohoku Welfare Corporation, the Sendai City Industrial Promotion Organization, and the city of Sendai.

The WBC’s top decision-making body is composed of representatives from Sendai city and the Development Bank of Japan on the Japan side, and from Finpro’s Japan subsidiary and the Finnish Institute in Japan on the Finland side (Konttinen 2003). The city of Sendai also has a consultative committee that can issue binding rules and whose members come from city agencies, local universities, and participating companies. A parallel committee in Finland
includes representatives from Finpro, the National Research and Development Center for Welfare & Health, Oulu Technology Park, and companies in the well being sector.

The international division of labor and funding responsibilities for the WBC are equally complex, bringing together actors from different institutional arenas at several geographic levels. Finland paid for the planning costs. The city of Sendai provided the land. A Finnish architectural firm designed the building after winning a competition judged by a joint Finnish-Japanese jury. The city of Sendai and the city's universities funded the Center's construction costs with assistance from Japan's Ministry of Health, Labor and Welfare. Finnish participants are in charge of training employees in the use of premises and equipment, and ensuring operating aims are met. Finland's National Research and Development Center for Welfare & Health is helping to implement Finnish welfare concepts. Over a dozen Oulu companies are providing software and medical equipment for the facility and engaging in joint R&D with counterpart Sendai firms. Oulu and Tohoku university researchers are also collaborating. The elderly care unit is managed by a third sector, social welfare corporation affiliated with Tohoku Fukushi University. The Sendai City Industrial Promotion Organization, a support center for local small-and-medium sized enterprises, manages the R&D unit. ²⁹

**National planning, policies and programs.** The Well Being Center is embedded in a trans-governmental policy network but primary political authority remains at the national level. The WBC occurs within a nation-state planning
framework in both Finland and Japan and with national political issues and objectives foremost in mind. The WBC is an effort by private for-profit companies to tap into a potentially immense global market in elderly medical care, but it is essentially a plan rational not a market rational joint venture. The WBC is a managed openness to the world economy, a managed globalization (Schaede and Grimes 2003).

The Well Being Center design responds to all three of Japan’s major national policy concerns. It emphasizes economic revitalization through quality of life services. It contributes to stabilizing the social security system by offering long term care that people can trust. It reduces fiscal costs in the medical system by decentralizing treatment from hospitals to community based nursing homes and home care.

Quality of life services. Japan’s main “economic revitalization strategy” is to expand employment in “diversified services” that will upgrade the quality of life of Japanese consumers. Promoting services will also stimulate manufacturing, it is believed, as new machines and equipment will be required to meet new service needs. The quality of life services strategy has been advocated by the Prime Minister’s Cabinet, it has a long term outlook, and it is meant to create employment stability by targeting selected service industries (Shimada 2003).

The aging society. The Finland Well Being Center fits Japan’s national plans for an aging society. Gold Plan 21 sets the direction. Agreed to by the Finance, Health and Welfare, and Home Affairs Ministries in December, 1999, Gold Plan 21’s objectives are to ensure dignified independent living for the
elderly primarily through community based support systems and home care; to improve the quantity and quality of long-term care services; and to establish an elderly care system that users can trust (Ministry of Labor, Health and Welfare 1999). Japan’s Long-Term Care Insurance Program will in effect guarantee a growing market for WBC type facilities, equipment and services.  

Decentralization. The WBC also reflects a political reform campaign, centered in the Prime Minister’s Office, to partially deregulate and decentralize Japan’s political economy. Local economic innovation is to be spurred through regional clusters. The public deficit is to be reduced by partially privatizing service provision and localizing the tax base. Grass roots demands for greater local autonomy are to be met through community based services.

The WBC is also part of an effort to reduce medical costs through deregulation and decentralization. Virtually every Japanese is covered by health insurance but health costs are soaring as the population ages, and with declining birthrates, there will be fewer workers in the future to pay for universal coverage. Total medical spending has gone up 400 percent since 1975 with the share taken by the elderly tripling from 13 percent to 35 percent. Even so, there is considerable pent up demand for elderly care services. Nearly four million older people are qualified to receive care but facilities provided directly by the government or through public corporations can accommodate only 700,000. So elderly and the chronically ill can end up in hospitals for months and years at a time (Coleman 1999). The WBC thus responds to Japan’s need for less expensive nursing homes and residence based alternatives to hospitals.
The WBC also reflects grass roots demands for more local autonomy in service provision. Community based care is built into the WBC service strategy. The Finnish welfare concept is to “help elderly people lead independent lives as long as possible, to integrate all elderly services into a seamless chain, to merge these services into the life of the community, and to apply a rehabilitative care culture and approach in all activities.” The Japanese have assiduously studied Scandinavian welfare systems and consider Finland a model for delivering health and welfare services. The WBC’s “design for all” concept provides products and services not only to elderly residing in the center but also to older people living in the surrounding community. The operating model is a set of concentric circles. The inner circle is for residents requiring intensive care, the next service ring provides day care, rehabilitation services, and home care devices. The outer ring connects the Center’s medical and security services to clients living at home.

Summing up. From a city’s vantage point, what does the Finland Well Being Center suggest about the changing nature of urban and regional policy, development, and governance in Japan?

1. The WBC engages Sendai in the new value creation economy. The city’s economic success will increasingly depend upon its knowledge base. Sendai must rely less on the branch operations of Japanese companies headquartered in Tokyo and more on its own local uniqueness and strengths. The city must be able to formulate its own industrial policies. That requires fiscal resources and expertise heretofore held mainly by the central government.
2. The WBC engages Sendai in a trans-national, trans-governmental network. Sendai’s international collaboration with Oulu is not just among private companies but among clusters of institutional actors at several geographic scales. Quasi-governmental networking organizations initiated the foreign investment and continue to help coordinate the relationship.

3. The WBC engages Sendai in a governance structure containing subunits of different national, regional and local governments, civic NGO’s and private firms. The international division of labor is equally complex, bringing together actors from different institutional arenas at different geographic levels to handle planning, land acquisition, building design, construction, training, software and equipment, R&D, and service delivery.

4. While the Well Being Center engages Sendai in a trans-national and trans-governmental set of relationships, political authority over the network rests primarily with national governments. The WBC occurs within a national planning framework in both Finland and Japan and with national political issues and objectives foremost in mind. The WBC fits Japan’s national strategy to revive the economy through quality of life services; it fits the nation’s effort to stabilize social security with Gold Plan 21 and Long Term Care Insurance; and it fits the Prime Minister’s national reform agenda to decentralize the political economy as a means to spur local innovation and reduce the budget deficit. In short, Sendai’s engagement with the world economy through the WBC is a nationally managed globalization.
5. The WBC also dovetails with local demands for community based decision-making, tax authority and service provision. The two term election of a reform oriented Prime Minister attests to this grass roots pressure as does the local manifesto movement (Masuda 2005).  

6. The WBC suggests that the national state in Japan is becoming more decentralized, disaggregated and pluralistic. Sendai city, as it assumes added responsibility for its own development, and as it engages with a wider range of institutional actors in more geographic locations, is becoming a more active local government. Whether the city is also improving its capabilities for “self-generated” economic development remains to be seen.

5. Conclusion

To return to our original question: is neoliberalism the best way to characterize trends in urban and regional policy in Japan, as indicated by our examination of the nation’s industry cluster policy and the Sendai-Finland cluster project?

Consonant with the theme of this book, Japan’s industry cluster policy and our case illustration could be seen to exemplify the emergence of “neoliberal spaces” in Japan’s developmental state. The cluster policy and WBC reflect Japan’s belated but increasingly vigorous campaign to attract foreign investors. The WBC involves efforts by private for-profit companies to tap into a potentially immense global market in elderly medical care, a sector here-to-fore run by public agencies and NGOs. And both the policy and the project are consistent with a political reform campaign, centered in the Prime Minister’s Office, to
reduce Japan’s social expenditures and fiscal deficit by deregulating public
service provision and localizing more of the tax base.

The apparent turn toward neo-liberalism notwithstanding, the industry
cluster policy and the Sendai project continue to manifest the basic features of a
developmental state. The cluster policy and the WBC occur within a state
coordinated national planning framework that matches incoming foreign direct
investment to policy goals. The WBC belongs to an industry targeted by the
government for its dynamic comparative advantage. The policy and the project
are embedded in a strategically organized unitary system of administrative
guidance and intergovernmental relations. And in all these respects, industry
cluster policy and the WBC indicate Japan’s managed openness to the world
economy.

The most intriguing features of Japan’s industry cluster policy and the
WBC are neither neo-liberal nor traditionally developmental but forecast new
post-developmentalist directions. The WBC is a network type of foreign direct
investment. Transnational collaboration occurs among clusters of actors in
Finland and in Japan, not just among private companies. Collaboration among
clusters was initiated and continues to be facilitated by quasi-governmental
“networking” organizations in both countries. Government and nonprofits
participate in the project along with business enterprises. Decision-making,
divisions of labor and funding are organized across transnational, national,
regional and local scales and among multiple institutional arenas.
This study suggests one should exercise caution in applying the neoliberalization concept to Japan. “Neoliberalism” originally emerged in response to "Keynesian liberalism" in the UK and the USA, and "Keynesian liberalism" in response to classical economic “liberalism” before that. Today’s changes in Japan are to developmentalism, not Keynesian liberalism, and the historical antecedents to Japanese developmentalism had little if anything to do with liberalism. Moreover, a fixation on global neoliberal hegemony can lead one to mistakenly label as neoliberal, institutional changes that actually derive from a different impulse, and that may be mapping out a different political-economic direction, as in the Finland Well Being Center in Sendai, Japan.
<table>
<thead>
<tr>
<th>Table 1: Developmentalism and Post-Developmentalism in Japan</th>
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<tbody>
<tr>
<td><strong>Developmentalism</strong></td>
</tr>
<tr>
<td>1950s-1980s</td>
</tr>
<tr>
<td><strong>Ideology</strong></td>
</tr>
<tr>
<td>-Catching up</td>
</tr>
<tr>
<td>-High growth &amp; savings</td>
</tr>
<tr>
<td><strong>State</strong></td>
</tr>
<tr>
<td>-Catching up</td>
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<tr>
<td>-High growth &amp; savings</td>
</tr>
<tr>
<td><strong>Public/private cooperation</strong></td>
</tr>
<tr>
<td>guided by a planning agency</td>
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<tr>
<td><strong>Sustained investment in mass education</strong></td>
</tr>
<tr>
<td><strong>Relative equality in income &amp; regional development</strong></td>
</tr>
<tr>
<td><strong>Economic intervention based upon market incentives</strong></td>
</tr>
<tr>
<td><strong>Centralized fiscal &amp; tax powers in unitary state framework</strong></td>
</tr>
<tr>
<td><strong>Policy</strong></td>
</tr>
<tr>
<td>-Selective protection of domestic markets from foreign imports &amp; FDI</td>
</tr>
<tr>
<td>-Industrial policies to upgrade manufacturing and generate export strength</td>
</tr>
<tr>
<td>-Centralized regional policy with industrial and technological decentralization from 3 metro areas to regions</td>
</tr>
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</table>
Table 2: Comparison of Developmentalist and Post--Developmentalist Regional Policies in Japan

<table>
<thead>
<tr>
<th>Developmentalist Regional policies</th>
<th>Post-Developmentalist Regional policies</th>
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<tr>
<td><strong>Change</strong></td>
<td></td>
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<tr>
<td>State</td>
<td>Developmental</td>
</tr>
<tr>
<td>Goal</td>
<td>Job growth</td>
</tr>
<tr>
<td>Focus</td>
<td>Strategic catching up industries</td>
</tr>
<tr>
<td>Decision-making &amp; funding</td>
<td>More centralized &amp; unidirectional</td>
</tr>
<tr>
<td>Means</td>
<td>Industrial decentralization and technological diffusion from the three major metropolitan areas to regions</td>
</tr>
<tr>
<td>Legitimacy</td>
<td>Relative income equality by class and region via job and wage growth</td>
</tr>
<tr>
<td><strong>Continuity</strong></td>
<td></td>
</tr>
<tr>
<td>Ultimate goal</td>
<td>National &amp; social security via global competitiveness</td>
</tr>
<tr>
<td>Ultimate focus</td>
<td>Dynamic comparative advantage</td>
</tr>
<tr>
<td>Scope</td>
<td>Nationwide</td>
</tr>
</tbody>
</table>
Figure 1: METI’s Industry Cluster Concept

**METI’s Supporting Program**

1. Forming initial networks (2001-5)
2. Refining networks (2006-10)
3. R&D support
4. Development of new sales routes
5. Funding
6. Human resource development
7. Entrepreneurial support (Business incubation)
8. Coordination with local governments

**Cluster Project Promotion Organization (CPO)**

Members (200-300 organizations)
Firms
Universities
Public research institutes
Goverments

Cluster Project Promotion Organization (CPO) engages in: provision of information; hosting seminars; coordinating business relations; university collaboration; advertising; and providing expert consultants.
Figure 2: METI’s 17 Industry Cluster Projects for the Second Term (2006-2010)

**Hokkaido**

1. Hokkaido Super Cluster Promotion Strategy II
   (3,000 new businesses: 4,400 billion yen)
   IT/Biotechnology fields
   About 750 firms and 21 universities

   Bio fields: About 380 firms and 19 universities

2. Tohoku MONOZUKURI Corridor
   (2,400 new businesses)
   Five areas: auto part industry, MEMS technologies, semiconductors, optical industry, dental-medical machinery and health-welfare industry
   IT and none-ferrous metal as the supporting industry for the entire cluster area.
   About 750 firms and 48 universities

   5. TAMA IT Venture Forum (250 new ventures)
   IT fields: About 560 companies and 1 university

**Chubu-Hokuriku**

6. Tokai Monozukuri Cluster Project
   (5,000 new businesses)
   Manufacturing fields: 1,100 firms and 30 universities

7. Tokai Bio-Factory Project (60 new businesses)
   Biotechnology fields: About 60 firms and 51 universities

8. Hokuriku Monozukuri Cluster Region
   (1,000 new businesses)
   Manufacturing fields:
   About 240 companies and 13 universities

**Kanto**

3. Regional Industry Revitalization Project
   (10,500 new businesses)
   -Western Tokyo Metropolitan Area (TAMA)
   -Chuo Expressway
   -Tokatsu-Kawaguchi-Tsukuba (along TX line)
   -Sanen-nanshin
   -Northern Tokyo Metropolitan Area
   -Keihina
Shikoku

14. Shikoku Techno Bridge Plan (2,000 new businesses)
Manufacturing/Health and Welfare fields:
About 400 firms and 5 universities

Kyushu

15. Kyushu Recycle and Environmental Plaza (K-RIP)
(1,500 new businesses)
Environmental fields: About 250 firms and 19 universities

16. Kyushu Silicon Cluster Project (1,500 new businesses)
Semiconductor fields: About 410 firms and 33 universities

Okinawa

17. Okinawa Industry Promotion Project
(4,500 new businesses)
Commercial/health/environmental fields:
341 firms and 4 universities

Note: METI’s Regional Bureaus don’t coincide with the usual definition of 10 regions that are often used by government. In the 10 usual regions, Kanto is divided into Southern Kanto (Saitama, Chiba, Tokyo, and Kanagawa) and Northern Kanto & Koshin (Ibaraki, Tochigi, Gunma, Yamanashi and Nagano). Chubu doesn’t exist. Tokai covers Gifu, Shizuoka, Aichi and Mie. And Okinawa is included in Kyushu.
Figure 3: Correlation between Regional Inequality and Population Increase in Three Major Metropolitan Areas, 1955-1999

Note: the 3 Metropolitan Areas include the greater Tokyo metropolitan area that covers four prefectures of Tokyo, Kanagawa, Saitama and Chiba; the greater Nagoya metropolitan area that covers two prefectures of Aichi and Mie; and the greater Hanshin metropolitan area that covers three prefectures of Osaka, Kyoto and Hyogo.

Table 3: Regional Inequality based on Per Capita Income measured by the coefficient of Variation for 47 Prefectures, 1990 - 2005

<table>
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<tbody>
<tr>
<td>SD</td>
<td>440</td>
<td>409</td>
<td>369</td>
<td>387</td>
<td></td>
</tr>
<tr>
<td>MEAN</td>
<td>2,623</td>
<td>2,821</td>
<td>2,858</td>
<td>2,699</td>
<td></td>
</tr>
<tr>
<td>SD/M</td>
<td>0.168</td>
<td>0.145</td>
<td>0.129</td>
<td>0.143</td>
<td>-0.025</td>
</tr>
</tbody>
</table>

Data Source: Ministry of Internal Affairs and Communications (MIC), Tokei de miru todofuken (Statistical Data on Prefectures in 2007), Tokyo, 2007. Statistical calculations by authors.

Table 4: Regional Inequality in Education measured by the Coefficient of Variation for 47 Prefectures 1980-2000.

<table>
<thead>
<tr>
<th></th>
<th>1980</th>
<th>1990</th>
<th>2000</th>
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<tbody>
<tr>
<td>Percent adult</td>
<td></td>
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<tr>
<td>population completing</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>higher education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD/M</td>
<td>0.426</td>
<td>0.358</td>
<td>0.303</td>
</tr>
</tbody>
</table>

| Percent adult        |      |      |      |
| population completing|      |      |      |
| senior high school   |      |      |      |
| SD/M                 | 0.103| 0.061| 0.061|

Data Source: Ministry of Internal Affairs and Communications (MIC), Tokei de miru todofuken (Statistical Data on Prefectures in 2007), Tokyo, 2007. Statistical calculations by authors.
Figure 4: Knowledge Cluster Initiative by the City of Sendai

National Policy Menu:
- METI: Industry cluster
- MEXT: Intelligent cluster
- Council for Science & Technology Policy
- MLHW: R&D for health, long-term care
- MOE: R&D for recycling, low carbon society

The City of Sendai
- Regional Intelligent Cluster
- Intelligent Cosmo Research Organization
- Sendai Creative Cluster Consortium
- Finland Wellbeing Center
- Sendai - Finland
- MEMS Park Consortium
- Intelligent Electronics Cluster Project
- Germany

Government Regional Bureaus
- Tohoku Bureaus of METI, FSA, DBJ, MLHW, and JETRO

Universities
Public research institutes
Firms
Gov’t organizations, Third sector organizations, NGOs

METI (Ministry of Economy, Trade & Industry); MEXT (Ministry of Education); MLHW (Ministry of Labor, Health & Welfare); MOE (Ministry of the Environment).
Figure 5: The Sendai-Finland Well Being Center in Sendai, Japan.

Transnational Cluster to Cluster Linkages

FINLAND

R&D Center for Welfare & Health
Technology Agency of Finland
FINPRO
City of Oulu
Oulu Technology Park
Oulu University
Local firms

JAPAN

City of Sendai
Sendai Knowledge Creation Initiative
Sendai City Industrial Promotion Corp
Tohoku Welfare Society
Tohoku University
Tohoku Welfare University
Local firms

Sendai-Finland Wellbeing Center

R&D Center
Long-Term Care Home for the Elderly

Note: Sendai-Finland Wellbeing Center is an international joint project run by the city of Sendai and Oulu, Finland. The long term care unit is managed by Tohoku Welfare University’s Tohoku Welfare Society (NPO). The R&D Center is managed by the Sendai City Industry Promotion Corporation (third sector) and brings together local universities and firms in Sendai and Oulu for joint health & welfare related R&D. The long-term care home for the elderly provides a new Finnish-Japanese “fusion” type of welfare service.
References


http://www.mlit.go.jp/hakusho/mlit/g18/index.html


http://www.smrj.go.jp/tohoku/site/018289.html


Sendai City Industrial Promotion Corporation. (2007) Sangaku kenkei senmonka haken (Dispatching experts in cooperation with business and universities)  
http://ww.siip.city.sendai.jp/cb_shinjigyo/lu-specialist_2.html


1 As typified by Chalmers Johnson (1987: 145) the developmental state is (1) ruled by a stable political-bureaucratic elite strong enough to deter interest group from undermining economic growth; (2) relations between public and private sectors are guided by a planning agency; (3) substantial investment is put into mass education; (4) income is equitably distributed; and (5) economic intervention is based primarily on market incentives. In contrast to the neoliberal free trade paradigm, developmentalists advocate selective protection of domestic markets from foreign competition; domestic control over the capital market, and aggressive industrial policies to upgrade manufacturing and generate export strength (Pempel 1998).

2 “Neoliberalization” refers to the spread of neoliberal principles, policies and practices among areas of the world and among sectors of social life.

3 At a higher level of abstraction, Jessop (2002: 458 ) identifies three restructuring alternatives to neoliberalism: neocorporatism, neostatism and neocommunitarianism. East Asian developmentalism could be considered a variety of statism, and “post-developmentalism”, a variety of “neostatism,” in his scheme. See below.

4 The Prime Minister’s Office issues a strategic Science and Technology plan every five years.

5 Manufacturing innovation in Tokyo is rooted in a powerful network of relationships among corporate headquarters, R&D labs, pilot production "mother" plants, and test markets (Fujita and Hill 2005)

6 Various kinds of industrial aggregations have a long history in Japan, including industrial districts, company towns, keiretsu networks, and the industrial integration system. But state policies have only recently targeted entire industry clusters. Local governments have played a key role from the outset in formulating the industrial cluster plan due to their closer proximity to and understanding of local small business networks (Fujita and Hill 1998).

7 For a description of the 17 industry cluster projects go to http://www.cluster.gr.jp/.

8 The CPOs resemble the local, neo-corporatist hubs theorized by Charles Sable (1989) in his work on flexible specialization in industrial districts.

10 Participants in the evaluation include METI’s Regional Bureau, local governments, public policy corporations like the Developing Bank of Japan, and NGOs, like the Tohoku Keidanren business federation.

11 According to METI’s (2006) calculations, the initial 19 clusters began in 2001 with the involvement of about 6,100 firms and 250 universities. About 40,000 new businesses were born by the end of 2005. There were 145 instances of technology transfer between universities and the private sector by 2005. The second term plan began with about 9,800 firms and 290 universities and METI estimates the generation of another 40,000 new businesses.

12 Plan-Do-Check-Action (PDCA).

13 The Law on the Advanced Direct Inward Investment Promotion Project (METI 2005: 60; 2007). Inward Foreign Direct Investment as a percent of GDP is miniscule in Japan (2.1% in 2003) by comparison with other OECD countries (e.g. 22.1% in the USA, 27/4% in Germany, 37.5% in the UK, 42.6% in France) (METI 2004b). The government’s goal is to have inward FDI reach 5 percent of Japan’s GDP by 2010.

14 Regional inequality in Japan is also low by international standards. According to a recent OECD (2005) study of the distribution of income and unemployment among regions in its member states, Japan ranked at the low end of the regional inequality continuum along with Sweden.

15 Tohoku covers the northern most area of Honshu, Japan’s main island, and has a population of 10 million. The region consists of six prefectures: Fukushima, Miyagi, Yamagata, Akita, Iwate, and Amoy. Sendai city is the capital of Miyagi Prefecture.

16 This project was approved as “Intelligent Cluster” by Ministry of Education (MEXT) in 2007. MEXT has a separate “Intelligent Cluster Project” that bears upon and is intertwined with METI’s industry cluster plan. MEXT’s aim is to create intelligent clusters around universities, public research institutes, and R&D oriented firms (MEXT 2006). MEXT started the program in 2002 and there are now 18 Intelligent Clusters operating in various parts of the country. In this approach, Regional Intelligent Cluster Promotion Councils bring universities together with local governments and businesses in R&D consortiums; they hire experts to advise cluster participants on science, technology, intellectual property rights and commercial matters; they hold public forums; and they disseminate research results.

17 The R&D unit has 8 rooms for R&D. Universities and firms can rent them. The R&D unit selected 8 R&D cases from open competition and provided 15 million yen (approximately US$150,000) to support them over a three year period. The 8 commissioned cases included Taiyo Electronics Corporation’s
development of a supersonic blood circulation scale, Sendai University's research on bone fracture prevention, and Tohoku University Hospital Rehabilitation Department's development of exercise therapy software for the elderly (Sendai-Finland Wellbeing Center 2007).

18 Centers of Expertise are tasked by the national government to "use internationally competitive knowledge and skills as a resource for business activities, the creation of new jobs, and regional development." There are 22 such centers in Finland in 45 areas of expertise. [http://www.oske.net/in_english/centres_of_expertise/oulu/](http://www.oske.net/in_english/centres_of_expertise/oulu/)

19 According to the MIT Industrial Performance Center, Oulu is northern Europe's most significant center of expertise. See [http://ipc-lis.mit.edu/area_finland.htm](http://ipc-lis.mit.edu/area_finland.htm)

20 An estimated 50 companies with 2,000 employees populate Oulu's well being industry. In the Oulu Technopolis as a whole, almost 6,000 people work for over 200 companies and generate two-thirds of Finland's high tech gross output. [http://www.oske.net/in_english/centres_of_expertise/oulu/](http://www.oske.net/in_english/centres_of_expertise/oulu/)

21 Tohoku University was founded in 1907 as the third Imperial University in Japan.

22 There is also a Miyagi Prefecture Industrial Technology Institute which provides research and technical assistance to local enterprises. A Tohoku Incubation Fund, a venture capital operation run by Tohoku Innovation Capital Inc., promotes new business start ups in cooperation with business, university and government. The Miyagi Organization for Industry Promotion focuses on small and medium size businesses and offers consultation, information exchange, facilitates grants, long term loans, and research support. Miyagi Prefecture (2005) Business in Miyagi. [http://www.pref/miyagi/jp/sanritu/ritihi_guide/english/chishiki/kenkyu.html](http://www.pref/miyagi/jp/sanritu/ritihi_guide/english/chishiki/kenkyu.html)

23 Tohoku Fukushi University was founded in 1875 as a branch of the technical school system operated by the Soto-shun Buddhist sect.

24 Finpro originated as the Finnish Export Association in 1919 after Finland became independent. In 1938 the organization changed its name to the Finnish Foreign Trade Association. The current operational concept and the name "Finpro" were introduced in 1999. In addition to the Helsinki Office, Finpro has 52 Finland Trade Centers in 40 countries. The staff of the Trade Centers comprise both Finnish and local experts with extensive experience in international business development and local knowledge of the target country. See "Finpro", [http://www.finpro.fi](http://www.finpro.fi)


Among other things, DBJ makes long term loans for urban redevelopment and downtown revitalization and is mandated to facilitate the "independent development of local economies." Development Bank of Japan. *Invest in Japan*. 

The support center is subsidized by the national government in accord with the national "Law on Supporting Small and Medium Enterprises."

The WBC is, in fact, a national project in both countries.

Japan was a youthful society fifty years ago; today it is one of the world’s oldest. Life expectancy was 54 years for women and 52 years for men in 1947; today it is 84 years for women and 77 years for men. Japan’s median age is 40, only Germany has a population that old, and will rise to 45 in ten years. By then, nearly one in four Japanese will be 65 and older, the highest percentage in the world (Mann 1998).

Under the Long Term Care Insurance Program each local government must estimate the number of facilities and amount of services available and likely to be needed over the next five years. Between 2000 and 2005, home help services were projected to rise from 170,000 to 350,000; the number of home-visit nursing care stations from 5,000 facilities to 9,900; welfare facilities for elderly requiring long term care from 290,000 to 360,000 people; and number of "centers for the life and welfare of the elderly" from 400 facilities to 1,800 facilities.

Decentralization of public finance was a key item on Prime Minister Koizumi’s reform agenda. The Prime Minister called his plan the "trinity reform" because it sought to redress the fiscal power imbalance between central and local governments with three changes. Some central government tax sources will be transferred to local governments and localities will be given more autonomy over what to tax. Subsidies from Tokyo will be cut substantially. And the system of revenue sharing through the local allocation tax will be remodeled. See "The Trinity Reform Plan." (2005) *Japan Echo*, volume 32, number 1, February.
Deregulation is enabling private companies to offer group home services for the first time and small scale nursing facilities have been multiplying in Japan.


In February, 2004, a group of local government leaders formed a league to promote the use of manifestoes in local elections. Local manifestoes are written pledges to voters by candidates running for local office that lay out concrete policies and set numerical targets and deadlines for their realization. Manifestoes are meant to keep local government leaders accountable to local voters rather than to the central government. A nongovernmental local manifesto promotion network has also emerged and there is an association of local assembly members promoting local manifestoes, as well (Masuda 2005).

Perhaps along the lines of the “networked world order” conceptualized by Anne Marie Slaughter (2004).