

Consume More for the Economy or Less for the Environment? Conflicts Between Economic and Environmental Remedies in Japan^{*}

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Abstract

How can we reconcile our aspirations for more economic growth or prosperity with the constraints of a finite planet? One of the high-income countries, Japan, makes us wonder if we can deal with two different challenges simultaneously: overcoming economic recession and solving environmental degradation. This study investigates the supply-side perspective which highlights the productive capacity and efficiency of the economy through economic lenses and the demand-side perspective which highlights the Japanese personal lifestyles through social lenses. This study aims to answer the question, if Japan's sustainable consumption behavior is counter to economic development whilst environmentally proactive. It finds that translating individual practices and cultures of sustainability into the macro- scopic economic growth path is key to a sustainable and healthy Japan.

Keywords

Sustainable consumption, Sustainable production, Individualization of responsibility, Japan

* This paper was presented at the annual conference of International Studies Association on 22-25 February, 2017 in Baltimore, Maryland. Authors appreciate fruitful comments by the panel.

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I. Introduction

How can we reconcile our aspirations for more economic growth or prosperity with the constraints of “a finite planet” (Jackson 2009)? According to the National Footprint Account, our world confronts 0.8 biocapacity deficit as of 2009 (Global Footprint Network 2016). This means that we require almost one more planet to sustain our lives on this planet. The 50 high-income countries record a biocapacity deficit of 3.6. That means they require 3.6 more planets to maintain their current lifestyles. To tackle overuse of our planet, the international community started to pay attention to the necessity of reducing consumption in our daily lives since the late 1990s.

One of the high-income countries, Japan, makes us wonder if we can deal with the following two different challenges simultaneously: (1) overcoming economic recession and (2) solving environmental degradation. The Japanese government and economists have coined the catch phrase “save less and consume more” as a remedy for their “lost decades” or long-term economic recession (Robins 2000). Simultaneously, environmental studies have shifted their attention from sustainable production to sustainable consumption, highlighting the increased role of individuals through norm emergence of lifestyle change. Japan, whose population is 126.6 million as of 2009 and has 3.3 biocapacity deficit, is not an exception for this international call to reduce individual consumption.

This study contrasts two starkly different perspectives on consumption in Japan, one of the most developed but least consuming countries in the developed world. Through an economic lens, we investigate the supply-side

perspective which highlights the productive capacity and efficiency of the economy, as well as the demand-side perspective through a social lens, which highlights Japanese personal lifestyle choices. With this analysis, we aim to answer the question of whether Japan's sustainable consumption behavior is counter to economic development whilst environmentally proactive. In doing so, we hope to open a window for further analysis of methods centered around sustainable consumption as a means to maintain growth without sacrificing environmental resources.

II. History of Discourses on Sustainable Consumption

Since the 1972 United Nations Conference on the Human Environment (UNCHE), or the Stockholm conference, the “first concerted effort of the international community to focus on the environment as a major topic of international concern and attention” (Speth and Haas 2006, 56), the international community has developed its environmental governance systems. The UN Conference on Environment and Development (UNCED) in 1992, known as the Earth Summit, and the World Summit on Sustainable Development (WSSD) in 2002, known as the Johannesburg Summit, were monumental gatherings of governments, corporations, nongovernmental organizations, the media, and others. These three decades witnessed international actions tackling marine and air pollution issues, as well as habitat and species protection.

We need to pay more attention to the period between 1972 and 1992 to understand one of key agendas that the international community has

been sticking to even now: sustainable development. Sustainable development was introduced in 1980 for the first time in history by the International Union for the Conservation of Nature (IUCN) in its report titled *World Conservation Strategy: Living Resource Conservation for Sustainable Development* (IUCN 1980). The World Conservation Strategy aimed to “help advance the achievement of sustainable development through the conservation of living resources” (iv). It was the World Commission on Environment and Development (also known as the Brundtland Commission) that delivered a clear definition of sustainable development in its seminal report titled *Our Common Future* in 1987. The Brundtland Commission states that sustainable development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development 1987). This definition contains two key concepts: the needs of the world’s poor and the idea that technology and social organization impose limitations on the environment. The powerful use of sustainable development by the Brundtland Commission led the UN General Assembly to accept the report, and “gave the term its new political salience” (Speth and Haas 2006, 67).

At the UNCED held in 1992, countries adopted a Rio Declaration in order to respond to the question of how the world would implement the concept of sustainable development. In particular, political compromises among developed and developing countries resulted in Agenda 21 which was “a detailed blueprint for putting sustainable development into practice” (Speth and Haas 2006, 70). In regards to changing consumption patterns, Article 4.8 states that countries should seek to achieve sustainable consumption patterns in their development process, guaranteeing the provision

of basic needs for the poor, while avoiding those unsustainable patterns, particularly in industrialized countries, generally recognized as unduly hazardous to the environment, inefficient and wasteful, in their development processes” (UN 1992).

In the meantime, United Nations Development Programme (UNDP) undertook producing an annual report, the *Human Development Report*, in 1990, which explains that the purpose of development is not limited to increasing growth in national production (GDP) but can encompass offering people more opportunities with regard to access to income, long life, knowledge, human and political freedom, personal security, community participation, and human rights (UNDP 1990). In particular, the 1998 *Human Development Report* investigated the unprecedented growth in consumption in the 20th century in terms of its scale and diversity (UNDP 1998). It is notable that it “marks the first time a major institutional actor in the struggle for global environmental sustainability has made consumption a top policy priority” (Maniates 2001, 46).

Since then, scholars have started calling for problematizing consumption. Ken Conca and his colleagues (2001) claim that in the name of sustainability, control of population growth and development of green technology, economic growth have been stressed, embracing production-oriented logic, leaving consumption in the backstage “only obliquely” in the form of calling for “green consumption” or “the moral imperative of recycling” (Conca et al. 2001, 1). Besides popular books, such as *Your Money or Your Life: Transforming Your Relationship with Money and Achieving Financial Independence* by Joe Dominguez and Vicki Robin (1992) and *The Overspent American: Why We Want What We Don't Need* by Juliet Schor (1999), and a film, *Affluenza*, produced by John de Graaf and

Vivia Boe (1997), relatively little research across the social sciences has connected problems of consumption with environmental degradation. Such a dearth of analysis can be contrasted with “the extensive research on global environmental governance and trade agreements, international environmental negotiations, or nongovernmental organizations” (Dauvergne 2010, 2).

United Nations Environment Programme (UNEP) and the UN Department for Economic and Social Affairs (UN DESA) launched the Marrakech Process on Sustainable Consumption and Production in 2003. This Marrakech Process aimed to implement Chapter III, “Changing Unsustainable Patterns of Consumption and Production,” of the Johannesburg Plan (UN 2002). Along with the 1998 *Human Development Report*, the Johannesburg Plan of Implementation indicates that all countries, led by developed countries, should promote “Fundamental changes in the way societies produce and consume” to achieve global sustainable development (UN 2002, 7).

To contribute to designing specific policies on sustainable consumption and production as well as supporting capacity building of the developing countries, the Marrakech Process has launched seven voluntary task forces led by on: 1) cooperation with Africa; 2) education for sustainable consumption; 3) sustainable buildings & construction; 4) sustainable lifestyles; 5) sustainable products; 6) sustainable public procurement; 7) sustainable tourism (Marrakech Process Secretariat, unknown year).

The Task Force on Sustainable Lifestyles was established by the Swedish Ministry of the Environment in 2005 in order to explore how to engage, exemplify, enable and encourage people, governments, and civil society to enhance sustainability in our everyday lives. The UN and this Task Force on Sustainable Lifestyles undertook “the Marrakech Process on

Sustainable Consumption and Production” from 2005 to 2009. The project conducted global surveys of 8,000 young urban middle-upper class adults (18-35 ages) from 20 countries¹⁾ through collaboration with more than 45 international partners. Its conclusions were presented in *Vision for Change: Recommendations for Effective Policies on Sustainable Lifestyles* (UNEP 2011). This report asserts that policies and initiatives promoting sustainable lifestyles are essential to make the shift towards more sustainable patterns of consumption and production. To accomplish this shift, the report emphasizes “the need to work together to better understand, educate and empower young adults” through executing three priorities: 1) “inspiring new visions of progress”; 2) “empowering behavioural alternatives as a step towards adopting sustainable lifestyles”; 3) “building trust and linkages to encourage participation” (UNEP 2011, 5). The recent Marrakech process attempts to draft a 10-Year Framework on “sustainable production and consumption” for the 2011 session of the UN Commission on Sustainable Development.

III. Consumption in Japan

The first contemporary historical example of a country whose economy showed a sustained period of double-digit growth of real gross national

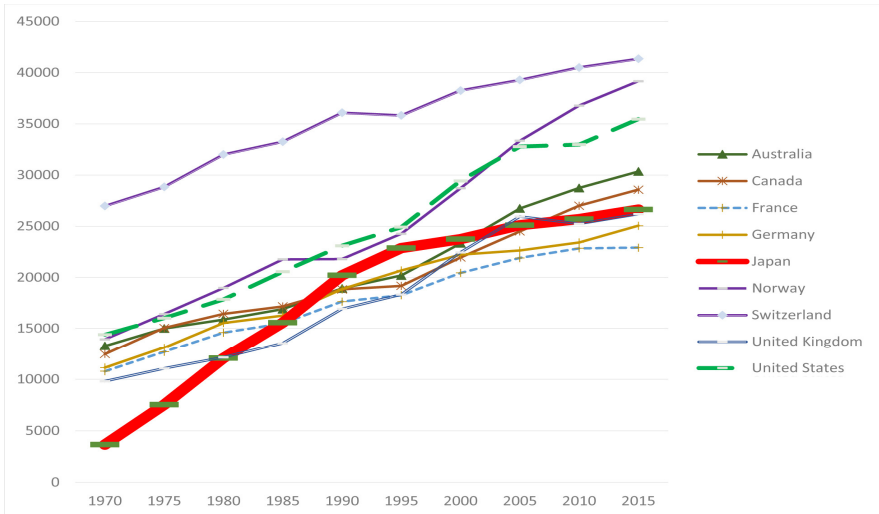
1) 20 countries include Argentina, Australia, Brazil, Canada, Columbia, Egypt, Ethiopia, India, Japan, Lebanon, Mexico, New Zealand, Philippines, Portugal, South Africa, Sweden, Turkey, United Kingdom, United States of America, and Vietnam. The questionnaire was provided in 10 languages (English, French, Arabic, Chinese, Japanese, Portuguese, Slovak, Spanish, Turkish, and Vietnamese), and is accessible online at <http://www.unep.fr/gssl/>.

product, Japan recovered from its defeat in World War II and joined the upper ranks of the developed countries within three decades (1960-1990, including its high-growth period between 1960-1975 and the stable growth period between 1975-1990) (Horioka 1994). Japan's GDP per capita has reached the top level among the most developed countries (World Bank 2017a).

However, Japan's consumption expenditure per capita presents a different story from its high level of economic development. Figure 1 shows that Japan records lower consumption expenditure per capita than not only Norway and Switzerland (which have a higher GDP per capita than Japan), but also Australia, Canada, the United Kingdom, and the United States.

Figure 1. Per Capita Real Private Final Consumption Expenditure

(Unit: 2010 US\$)



Source: World Bank 2017b

Note: From top to bottom, Switzerland, Norway, United States, Australia, Canada, Japan, United Kingdom, Germany, France

Particularly, compared to the United States, Japan recorded a significantly lower ratio of per capita private final consumption expenditure to per capita GDP (Table 1). All of these observations demonstrate that the Japanese people tend to consume less than other highly developed countries.

Table 1. US–Japan Comparison of Per Capita GDP and Per Capita Private Final Consumption Expenditure

	Conversion to US\$ Using Purchasing Power Parities	
	Japan-US Ratio of Per Capita GDP (%)	Japan-US Ratio of Per Capita Private Final Consumption Expenditure (%)
1980	69.7	67
1981	70.9	67.3
1982	75.3	69.8
1983	74.7	68.9
1984	72.9	67.8
1985	74	67.1
1986	73.8	66.9
1987	74.6	68.1
1988	76.2	69.6
1989	78	71.5
1990	82.2	74.2

Source: Horioka 1994, p. 295.

This assertion can be supported by the ecological footprint of consumption calculation that the Global Footprint Network’s National Footprint Accounts Public Data Package from 2016 has provided. The Global Footprint Network (2016) defines the ecological footprint as “the

area of land and water it takes for a human population to generate the renewable resources it consumes and to absorb the corresponding waste it generates, using prevailing technology.” In other words, it quantifies the natural capital that a given population uses, compared to the amount of natural capital we would need to dispose of waste from said use. The components of the footprint include cropland, forest land, fishing grounds, grazing land, and built-up land. Table 2 shows that Japan is one of the countries that record the lowest ecological footprint of consumption among high-income OECD countries. Except Hungary, New Zealand, Norway, and Slovak Republic, Japan records the lowest ecological footprint of consumption. Particularly, Japan and the United States, the only two countries with populations over 100 million, present strikingly different pictures of consumption. Japan records a total ecological footprint of 3.8, while the United States records an ecological footprint of 7 – almost double that of Japan’s.

Table 2 OECD High-income Countries’ Ecological Footprint of Consumption

Country	OECD Entry	Population (millions)	Cropland Footprint	Grazing Footprint	Forest Product Footprint	Fish Footprint	Carbon Footprint	Built up land	Total Ecological Footprint
World		6817.7	0.6	0.2	0.2	0.1	1.4	0.1	2.6
Australia	1971	21.9	1.2	0.7	1	0.2	2.4	0	5.4
Austria	1961	8.4	1.1	0.4	0.6	0.1	2.8	0.3	5.2
Belgium	1961	10.7	2.1	1	0.5	0.3	2.9	0.5	7.3
Canada	1961	33.7	1.2	0.4	0.8	0.1	3.3	0.1	5.9
Czech Republic	1995	10.4	1	0.2	0.7	0.1	2.6	0.2	4.7
Denmark	1961	5.5	3	0.7	0.9	0.7	2	0.3	7.6
Estonia	2010	1.3	1	0.1	1.8	0.2	1.7	0.1	5

Country	OECD Entry	Population (millions)	Cropland Footprint	Grazing Footprint	Forest Product Footprint	Fish Footprint	Carbon Footprint	Built up land	Total Ecological Footprint
Finland	1969	5.3	1.2	0.2	0	0.4	3.6	0.2	5.6
France	1961	62.4	1.3	0.4	0.6	0.2	2	0.3	4.9
Germany	1961	82.4	1.3	0.3	0.3	0.1	2.3	0.2	4.5
Greece	1961	11.3	1.1	0.6	0.3	0.4	2.2	0.1	4.7
Hungary	1996	10	0.9	0.1	0.4	0	1.4	0.2	3
Ireland	1961	4.4	1.4	0.4	0.4	0.1	3.2	0.2	5.7
Israel	2010	7.3	0.9	0.3	0.3	0.1	2.3	0.1	4.1
Italy	1962	60.2	1	0.4	0.4	0.3	2.1	0.1	4.4
Japan	1964	126.6	0.5	0.2	0.2	0.5	2.4	0.1	3.8
Korea	1996	48	0.7	0.2	0.2	0.4	2.7	0.1	4.3
Netherlands	1961	16.6	1.5	1.2	0.4	0.3	2.3	0.2	5.9
New Zealand	1973	4.3	0.7	0	0.8	0	1.2	0.1	2.7
Norway	1961	4.8	0.7	0.5	0.5	0	0.8	0.1	2.7
Portugal	1961	10.7	0.9	0.4	0.1	1	1.9	0.1	4.4
Slovak Republic	2000	5.5	0.8	0.2	0.6	0.1	1.8	0.2	3.5
Slovenia	2010	2	0.8	0.3	0.1	0.1	2.6	0.1	4.1
Spain	1961	45.6	1.3	0.3	0.3	0.4	1.9	0.1	4.3
Sweden	1961	9.3	1	0.6	0.6	0.3	2.7	0.2	5.4
Switzerland	1961	7.6	0.7	0.3	0.5	0.2	3.3	0.1	5
United Kingdom	1961	61.9	0.9	0.5	0.5	0.2	2.4	0.1	4.5
United States	1961	307.7	1.2	0.3	0.7	0.1	4.4	0.1	7

Source: Global Footprint Network 2016.

http://www.footprintnetwork.org/en/index.php/GFN/blog/national_footprint_accounts_2016_carbon_makes_up_60_of_worlds_footprint

Note: Iceland and Luxembourg have no data; Chile, Latvia, Mexico, Poland, Turkey are upper middle income countries.

IV. Economic Remedies for Japan

In order to refine and specify the question of whether Japan's consumption behavior is counter to economic development whilst environmentally proactive, it is necessary to review the relevant extant literature on and surrounding the topic.

Since the Japanese economic downturn in the late 1980s and the Asian financial crisis in the late 1990s, the high-saving and high-investment Asian model has been challenged. According to Shigeru Thomas Otsubo (2007), the massive investment in machine industries has resulted in lowering prices of capital goods, but at the same time subdued investment in small businesses, consumer-goods and the service sectors. He called this a "dual structure" economy, which led to lower wages and worsening working conditions in those sectors. This issue, which the Japanese government policy did not favor, leads to a picture of deflation and negative interest rates.

In certain ways, the Keynesian model has certain socialist structural traits and, arguably, takes power away from the "invisible hand" and places it in the hands of the government instead (Crotty 2019). Keynes' notion of increasing aggregate demand through government spending and allowing the multiplier effect to further heal a struggling economy was the method used to recover from the Great Depression in the West. The great success of the policy and its continued use (with good results) in the early years of the Cold War are arguably why many countries have subscribed to Keynesian thought. At the tail end of the Cold War,

neoliberals and monetarists such as Milton Freidman (2002) blamed the methods used by Keynes as the causes for the very economic ills that he was trying to fix. In addressing the government intervention that Keynes promoted, monetary economists cited these methods as the reason for misallocation of capital (Gamble 2001) and thus the potential of recession and depression.

How can we apply these explanations to Japan's long-term economic stagnation? Post-WWII Japanese GDP grew astoundingly until 1995. After this point, growth fluctuated and plateaued, not picking up since. But what caused the rapid almost miraculous growth until that point? The answer would need tomes to spell out. In fact, as the base year of 1951-53, the Japan's index of gross national product for 1961-63 was 248; and one for 1971-73 was 664 (Johnson 1982). Over the postwar period between 1946 and 1976, Japan has achieved 55-fold economic growth.

The answer to the question of how this growth was possible is an amalgamation of the two theoretical frameworks mentioned above. Both approaches explain the Japanese economic growth until 1995 whilst simultaneously providing grounds for the why it failed that year.

The Japanese government used Keynesian theoretical models similar to those used to combat the Great Depression in the US to spur aggregate demand. It did this by lowering interest rates, like what Prime Minister Shinzo Abe is currently doing, to promote spending and innovation in the form of consumption (Christensen and Spiegel 2019). It also devalued its currency to make its goods more attractive to better-recovered markets abroad, improved efficiency, and made homogeneous goods more effectively and less expensively than its competitors whilst not competing at home

(Singh 1998). It also joined international institutions to further solidify this relationship and increased social programs back home to produce a more efficient and productive population.

The consumption behavior to which we are referring is one in which saving significantly outweighs spending (consuming) in Japan. As a result, our economic analysis section will primarily be a critique of the efficacy and consequences of ‘Abenomics’, which aims to increase consumption and lower saving through boosting government spending and the money supply. This method of remedying the Japanese economic situation has its supporters and its critics - all of whom present arguments in line with economic theory for why Abenomics is or is not the best avenue to fixing Japan’s slump.

Addressing the issue of consumption first, Jonathan Soble (2016) takes a different approach to consuming more and saving less. He notes that an important aspect of Abenomics is its aim for a weaker Japanese Yen in order to make consumption of the Japanese goods and services abroad cheaper. By doing this, Japan’s lower consumption levels at home will be counteracted by a higher demand for the island-nation’s exports – thus increasing the country’s money supply. Anthony Fensom (2016) pushes back against Soble’s macroscopic approach. He asserts that because of Japan’s burgeoning elderly population, premiums for the young are rising, encouraging them to save rather than spend. This provides evidence for the claim that by making consumption easier and saving harder “the solution might lie closer to home than in the realm of exotic policy instruments” (Fensom 2016)

Japan entered the countries of aging societies in 1970 for the first time when the population aged 65 and over reached 7 percent of its

total population. Japan had become the world's oldest populations in 2002, and its total population started to decline in 2005 (Thang 2011). More recently, Japan's National Institute of Population and Social Security Research (2012) projected in its every-five-year report that its population would decrease and fall below 100 million by 2048, based on the medium-fertility projection. It also estimates the declines of the ratio of the young-age population, under the age of 15, whose "share is expected to continue to shrink from 13.1% as of 2010 to 11% in 2025, drop below 10% in 2044, and eventually decrease to 9.1% in 2060 (National Institute of Population and Social Security Research in Japan 2012, 2). Accordingly, the old-age (65 ages and over) dependency ration (the percentage of the old-age population relative to one of the working-age group) is projected to increase from 36.1 in 2010 to 50.2 by 2022, and reach 78.4 by 2060 which means that there would be only 1.3 working-age adults to support one senior resident (National Institute of Population and Social Security Research in Japan 2012, 4).

Of course, Japan is not the only developed country facing serious aging population issues. However, it is notable that "Japan has traversed the demographic transition at an unprecedented speed" (Thang 2011, 173). It took only 24 years for Japan to double its proportion of the elderly population from 7.1 percent to 14.1 percent. The transition to an aging society for other developed countries took at least twice longer than Japan (Table 3).

Table 3. International Comparisons of Proportion of Population Aged 65 and Over and Speed of Aging

Country	Population aged 65 and over (%)		Speed of aging
	2005	2030 (projected)	
Japan	20.1	31.8	26
Italy	19.6	26.8	61
France	16.5	24.3	115
Sweden	17.2	22.6	85
UK	16.1	20.9	45
US	12.4	19.8	69

Source: Thang 2011, 174.

According to economic theory, the key to maintaining a growing and healthy economy is the work force. The demographic issues facing Japan must therefore be mentioned in the context of consuming more and saving less. Jiyeoun Song (2015) addresses the fact that Japan is facing an unprecedented socio-demographic struggle with slow growth rates. This struggle is inherently a detriment to consumption as older members of the population consume less. This is the case because, in most cases, they have paid off their mortgages, no longer support their children and are less inclined to interact with newer and more expensive forms of technology. Song’s initial outlining of the “three arrows” of Abenomics (aggressive monetary policies, flexible fiscal policies, and economic growth strategy) illustrates how the Abe administration is attempting to curb deflation and nearly two decades of recession. By lowering interest rates in an effort to make spending more attractive rather than saving, while simultaneously increasing taxes on consumption, many economists and policy experts argue that the Japan’s methods are counterproductive. The

third arrow of Abenomics encompasses a wide array of social and economic policies, such as “human capital investment, technological innovation, [the] Trans-Pacific Partnership, and local revitalization programs” (Song 2015).

As mentioned before, the work force is the aspect of the economy that uses these initiatives to spur the economy forward and upward. In spite of Abenomics’ attempts at remedying the issues of economic stagnation, the issue will not be solved without significant social solutions. Pertaining to this is the employment of women. Song notes that Japan ranks well regarding female labor force participation; beating out the UK, the United States, South Korea and Sweden (among others) but lagging behind Australia, Denmark, Canada, and Germany. The Abe administration thinks that the 30-39-year old segment of the female population who drop out of the workforce to rear children must be galvanized to stay in the workforce in order to spur the economy. Whilst being theoretically sound, if the necessary government institutions are not in place, marriage, child-birth and child-rearing interrupting employment will continue to make it difficult for working women to achieve their full potential as a result - further decreasing consumption.

Leonard J. Schoppa also points out that Japan is experiencing a declining supply of workers and needs to “steer itself onto a sustainable macro-economic path” by “adopting fundamental social and economic reforms designed to boost productivity, encourage the participation of women and immigrants in the workforce, and facility work-family balance so that families can choose to have more children” (Schoppa 2006, 206).

As such, many posit that a cultural and social shift is necessary with regard to how individual Japanese residents perceive their place in their

own economy. Thus, when analyzing whether the spending more and saving less narrative is effective through a comparative lens, the foibles and applicability of inherent differences between nations must be noted. These thoughts hold temporal significance as prior to the country's current economic slump, the nation was guided and had a much more significant sense of unity in the aftermath of World War II.

For example, returning to Song, babysitters, nannies, increased transport to-and-from the workplace, pre-prepared foods and convenience-focused baby supplies could impact the environment significantly resulting in more women staying in the workforce. With regard to global competitiveness, workplace diversity allows for diversification and increased profits. By increasing after-school care and childcare positions drastically, the Abe government kills two birds with one stone: both increasing female labor force retention and creating more jobs in childcare to boost the economy. These are all valid arguments for spending more and saving less. But will it be enough and will the Japanese people follow through if given the opportunity? This is the key to growth.

V. Beyond Individualization of Responsibility

When Daniel Deudney (1990) cast doubt upon the tendency to link environmental degradation and national security, he contended safety from violence and safety from environmental threats have little in common. He contrasted them in terms of associated organizations that provide protection from violence. While national security from violence is engaged

by military organizations and the specialized professional group, environmental security from environmental degradation is associated with “virtually all mundane activities,” and thus “requires behavior modification” (Deudney 1990, 465).

This contention of pro-environmental behavior change to respond to environmental degradation is that “environmental problems necessitate modifications in conduct at the level of the individual” (Dilley 2015, 272). Academic interest in behavior change for the environment traces back to a few decades (Lowe and Wolfgang 1986; Eden 1993; Hinchliffe 1996). Tim Jackson asserts that behavioral change has become the “holy grail” of sustainable development policy (Jackson 2005, xi) to respond to increasing concern about the environmental degradation endangered by consumerism. In the meantime, among other fields, environmental psychology has extrapolated what psychodynamic factors can play a role in stimulating environmental behavior, and environmental sociology focuses on social norms to explain the impact of contextual factors (Dilley 2015).

On the other hand, this focus on individual behavior change has invited various critiques. Michael F. Maniates (2001, 2002) calls the contention of proenvironmental behavior change “individualization of responsibility” that “embraces the notion that knotty issues of consumption, consumerism, power and responsibility can be resolved neatly and cleanly through enlightened, uncoordinated consumer choice” (2001, 33). He warns that there will be little room for institutions for sustainable development, and “the nature and exercise of political power, or ways of collectively changing the distribution of power and influence in society” would be underestimated (Maniates 2001, 33).

Furthermore, Chris Gibson and his colleagues (2010) as well as Elizabeth

Shove (2010a; 2010b) problematize this individualization of responsibility that ignores other important conceptualizations of the causes of environmental issues and the solutions to them. Conca and his colleagues called for three social elements of solutions: “social embeddedness of consumption,” “attention the linkages along commodity chains of resource use that shape consumption decisions,” and “emphasis on the hidden forms of consumption embedded in all stages of economic activity” (Conca et al. 2001, 6).

Anthropologists argue that the Japanese culture stresses the population’s keen awareness of its environmental challenges as Japan is a “small island nation, devoid of natural resources,” and Japan is “deeply concerned about preserving its natural assets, and intent upon harmonizing man’s lifestyle with environmental responsibility” (Rosenbluth and Thies 1999, 1-2).

Japan has already been an environmental icon in the eyes of many developed countries. In terms of individual civilian lifestyles, sustainable - particularly an attention to not wasting - has been center to a culture of respect and care for one’s immediate surroundings. In particular, children have to clean and maintain their own schools rather than having custodians do it. Many people don’t use paper tissues but carry handkerchiefs on a daily basis. Children carry water bottles all the time not only to hydrate themselves but also not to inconvenience others. Children’s school lunch is almost waste free as they are not served with one-time purpose dishes and cups. Even though students eat school lunch, they have to bring their own cups and handkerchiefs. At restaurants, food leftover can rarely be noticed.

These environmentally friendly practices of Japanese people and natur-

alized individualization of responsibility for environmental damage come from their attitudes toward nature. While European countries fought against nature and emphasized the idea of human dominance over nature (White 1967), Japanese society has a different concept of nature (Watanabe 1995). An international comparative survey, Global Environmental Survey, confirms these structural differences (Aoyagi-Usui et al. 2003). This survey was carried out in Japan, Thailand, Philippines, and the Netherlands, in regards to various topics concerning the environment and particularly the relationships between values, attitudes and behavior. The survey results demonstrated that “the structure of environmental values in Asian countries differs from those in Western countries” in that “an environmental way of thinking blends with traditional concepts of honoring parents and family security” in Asia (Aoyagi-Usui et al. 2003, 30). In contrast, Western people believe environmental concepts run counter to traditional values” such as individualism and egoism (Aoyagi-Usui et al. 2003, 30). In other words, this study reveals that environmental values are more linked in Asia with traditional and altruistic values than in Western countries (conducted in the Netherlands and the United States). Particularly in Japan, “environmental values are strongly connected with traditional values” and “political, energy-saving, and green-consumer behaviors seem to be in the same social context, with signs of significant variables in the same direction” (ibid.).

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