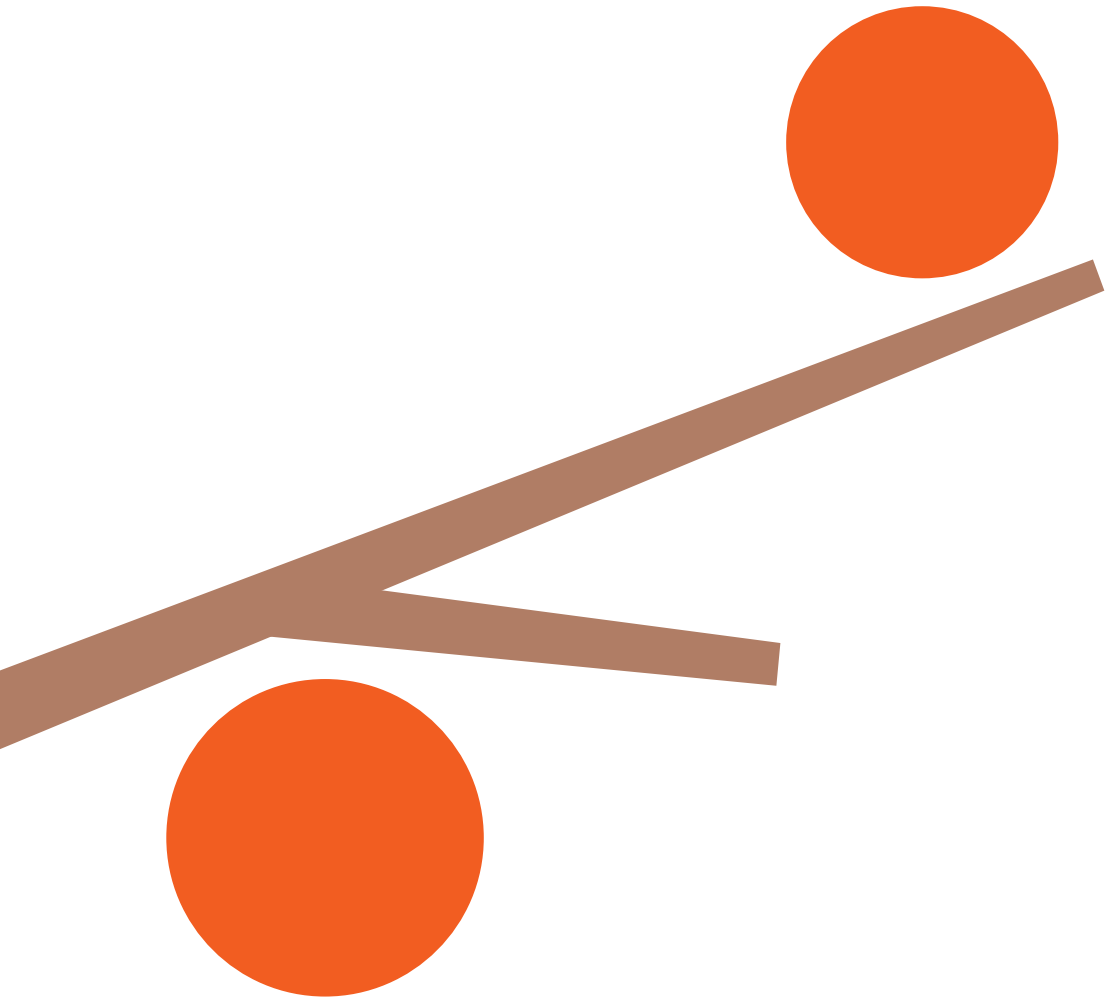


Social Welfare Issues in the Era of the Fourth Industrial Revolution

Sang-mok Suh President, Korea National Council on Social Welfare



Social Welfare Issues in the Era of the Fourth Industrial Revolution

Contents

- 1 The Fourth Industrial Revolution and Social Welfare 4.0 — 3
- 2 Why Value-Creating Social Contribution? — 61

1

The Fourth Industrial Revolution and Social Welfare 4.0

The Fourth Industrial Revolution and Social Welfare 4.0¹

1. A Trouble-shooter in the Industrial Revolution, Social Welfare

The First Industrial Revolution and Social Welfare 1.0

The year 1776 was a turning point to usher in a new era of human history. The Scotsman engineer James Watt and the English entrepreneur Matthew Boulton from Birmingham formed a joint venture that produced the first commercial steam engines in 1776, directly fueling the First Industrial Revolution. Also, the Scottish economist and philosopher Adam Smith published his magnum opus *The Wealth of Nations* in 1776. It was also in 1776 when the United States declared its independence after winning the war against Britain, providing a momentum that allowed democracy which started in the United Kingdom to spread to other parts of the world.

¹ This article is Chapter 1 of *Social Welfare 4.0: Social Innovation and Local Welfare Community* (Korea National Council on Social Welfare, 2018) the author wrote.

Significant technological innovations took place in ancient Egypt, China, and Greece, but they failed to develop into an industrial revolution largely because they were not commercialized enough to improve the efficiency of the entire economy. In contrast, the invention of steam engines influenced greatly the entire economy through commercialization. In 1775, engineer Watt and entrepreneur Boulton established 'Watt&Boulton Company', a joint venture, and the next year, it produced two of its first steam engines. This is how the First Industrial Revolution began as a result of combined efforts of Watt's technological expertise and Boulton's entrepreneurial ability.

Watt did not invent the steam engine but developed a technology that enhanced its performance greatly, which was commercialized with the help of Boulton, making Watt a very important person in history. The steam engines made by Watt were used mainly to pump underground water for mines. Afterward in 1790, Samuel Crompton invented the spinning machine based on this steam engine, driving the dramatic development of the textile industry. In 1800 when the patent right to the steam engine of Watt expired, steam engines began to be used to produce locomotives. In 1825, the first locomotives, using a steam engine, transported minerals within mines. As a passenger railroad linking Liverpool and Manchester was built in 1830, steam

engines became a powerful spur for major innovation in the transport sector.

Before the First Industrial Revolution, the British economy stood still. Although the Agricultural Revolution increased the food supply, it also made population growth possible at the same time, leaving per-capita income across Europe at 0.1% per annum on average over the thousand years before the industrial revolution. Given that it takes 630 years or so for income to double at such a low growth rate, economic development can be seen as having been almost flat. However, the First Industrial Revolution changed the course of the then economy. Economic growth exceeded population growth, which allowed real consumption to get better for the first time in history. For example, annual average economic growth of Britain's economy stood at 0.7% during the period of 1700-1780 before the revolution but grew to 1.8% in the period of 1780-1801 after the onset of the industrial revolution and to 2.7% in the period of 1801-1831 when it was in full swing.² The First Industrial Revolution accelerated Britain's economic growth and allowed the country, a relatively underdeveloped region in Europe at that time, to become the world's center of economy and politics. It opened the era of 'Great Britain' or 'Pax Britannica'.

² Peter Botticelli (1997), "British Capitalism and the Three Industrial Revolutions" in *Creating Modern Capitalism* (ed. by Thomas McCraw), Harvard University Press

The industrial revolution helped businessmen and merchants improve their social status by accumulating wealth, compared to the nobility, the existing governing class. The working class also benefited from the industrial revolution, which gave them new jobs, but their working conditions were poor. Most of the factory workers had to work more than 10 hours a day for wages which were extremely low for them to lead a decent life. Child labor was a major issue, particularly during the First Industrial Revolution. In those days, most children were given no opportunity for education, and it was natural for them to work at a factory. Employers were allowed to pay children wages as low as a tenth to a fifth of adult workers. Also, children better adapted to automated factories than adults, which made employers prefer to hire children. It is shocking to know that in 1788, children accounted for two-thirds of the workers at some textile factories in Britain.³

In the 1860s, the social welfare movement started as a grassroots effort to solve social issues that surfaced throughout the Industrial Revolution in Britain, and this well represents activities in the era of 'Social Welfare 1.0.' In modern terms, private-sector social welfare activities began in the UK because the country is the birthplace of democracy and the Industrial Revolution. Britain in the 1860s, almost a century after the Industrial Revolution, experienced both of its posi-

tive and negative impacts. Despite government supports including the Poor Laws, the working conditions were not satisfactory and somewhat oppressive from a modern viewpoint. Furthermore, considering that civil society was well developed in the country during the long democratization process, it was fairly natural that the private sector stood up for social welfare before the government took any action.

In the mid-19th century, the urban poor emerged as a new social issue in Britain, and many charity organizations worked for the poor in London. For example, there were 640 charities in London in 1861, and they spent 2 million pounds a year, of which 1.2 million pounds were used for poor relief.⁴ This amount was three times the 0.4 million pounds spent by the then London poor laws enforcement authorities.

Since there were many charities like this, the need for cooperation among them was raised. The Charity Organization Society (COS) was formed as a federation of these charities in 1869 to solve this issue. Its activities have significant implications in that they were the world's first private-sector welfare activities based on the casework. The grassroots COS activities that originated in Britain spread to America, leading to the launch of America's first COS in Buffalo in 1877. In the

3 Douglas Galbi (1994), "Child Labor and the Division of Labor in Early English Cotton Mills", Center for History and Economics, Kings College

4 H. Solly (1984), "A Few Thoughts on How to Deal with the Unemployed Poor in London and its Roughts and Criminal Classes, 1868", (Park Gwang-jun (2002), cited again in *Social Welfare Theories and History*)

United States, the COS activities developed into a new field of social work study after COS activist Mary Richmond⁵ published her work *Social Diagnosis* in 1917, with its central stage gradually moving to America from Britain.

While COS staged humanitarian activities led by the emerging capitalists, the 'Settlement Movement' that started in the same period was a community movement led by intellectuals who were actually living in poor areas and devoted to solving issues with the communities. As this movement was centered in early stages on a facility called 'neighborhood community center', it is also known as the 'neighborhood community center movement'. The COS activities were based on the conventional perception that poverty is the responsibility of individuals, while the Settlement Movement came from a reformative idea emphasizing society's responsibility to poverty, which is a big difference in philosophy between these two movements.

Comprehensive poverty surveys were also conducted in this period. Among the most representative surveys of this kind were the Booth survey and the Rowntree survey. A successful businessman Charles Booth believed that poverty in London was not exactly known to the public. He carried out a full-fledged poverty survey at his own expense from 1886 to 1903 and found a highly shocking result that 30.7% of the then Londoners were poor. The survey also showed

that merely 20% of the causes of poverty were attributable to the poor such as laziness or inability, and most at 80% were associated with social factors such as unemployment, low wages and diseases. This was the opposite of the widespread perception in those days that individuals should be responsible for their poverty. Businessman Seebohm Rowntree like Booth conducted a poverty survey in the city of York, his hometown, in 1889 at his own expense and obtained a similar result to Booth's survey.

The biggest problem politically and socially during the First Industrial Revolution in Britain was the poor working conditions and environment of factory workers. Early in the First Industrial Revolution, there were no labor unions and laws guaranteeing the minimum levels of working conditions, making it impossible to protect the rights of workers. To solve this problem, the British government and politicians made the Factory Act, which is considered the first modern social law. When it was enacted in 1802, its purpose was politically to prevent a workers' revolution from happening in the UK as the French Revolution in 1789. The law is an example of the government and political circles taking the initiative in protecting the underprivileged, but the private-sector activists

⁵ Mary Richmond laid the foundation for the study of social welfare case management by publishing *Social Diagnosis* in 1917. Afterward, the initiative in this area has shifted to the United States, and the US National Association of Social Workers is still playing a key role in setting new standards in this area.

such as Robert Owen played a key role in the process.

The Second Industrial Revolution and Social Welfare 2.0

The Second Industrial Revolution should be understood as an extension of the First Industrial Revolution. First of all, in terms of period, the Second Industrial Revolution refers to the technological development and industrialization almost across all industries over the period from around 1850, when the First Industrial Revolution drew to an end, to 1914 when the First World War broke out. Based on the legacy of the First Industrial Revolution that changed production method from 'by hand' to 'by machinery', automation sped up and mass-production systems spread to a variety of industries such as steel, chemicals, electricity, and communications beyond textiles.

The driving force for the First Industrial Revolution was a steam engine that converted thermal energy of steam into mechanical energy, but it was replaced by an internal combustion engine that changed thermal energy into mechanical energy by burning the fuel inside the engine, as the Second Industrial Revolution unfolded. Working conditions were very poor in the first, but during the Second Industrial Revolution, internal combustion engines and electricity were used for production, which led to great improvements in working conditions at a factory. On top of that, the government estab-

lished the social insurance scheme that helped enhance the rights and welfare of workers, contributing to the gradual rise of the middle-class during this period. While the First Industrial Revolution was led by Britain, the Second Industrial Revolution expanded its geographical scope to Europe including Germany, America beyond the Atlantic, and Japan in Asia.

The first technological innovation in the Second Industrial Revolution appeared in the steel industry. Britain's inventor Henry Bessemer developed a 'Bessemer converter' in 1856, which can produce steel in large quantities in a more economical way, contributing to the breakthroughs of the steel industry. This enhanced competitiveness of the industry led to dramatic advances in areas using steel enormously such as railroads, ships, bridges, and high-rise buildings. The technological innovation in the chemical industry was led by Germany with a strong tradition of basic research. The development of organic chemistry in Germany made it possible to produce various chemical products such as agricultural fertilizers, dyes, and pharmaceuticals and, as a result, helped Germany become the world's leader in the chemical industry by 1915.

The technological innovations in electricity which is seen as the highlight of the Second Industrial Revolution began when British scientist Michael Faraday first discovered elec-

tricity after long experiments in 1839, but the perfection of electrical technology was achieved by American inventor and businessman Thomas Edison and George Westinghouse. Areas of the electrical telegraph, telephone, and communications also witnessed important technological innovations second only to electricity in the Second Industrial Revolution. It was British-born American Graham Bell who had the first-ever patent on the telephone.

The core stage of the Industrial Revolution moved to America from Britain for the following reasons. First, America was market-centered in its founding process and developments thereafter, and the overall process from its early settlement to the westward expansion and the annexation of Alaska and Hawaii was a long journey of entrepreneurial adventure. Second, America has vast land and large markets. Since bigger markets mean more profits to businessmen, British inventors moved to America for better opportunities of business at a much bigger scale.

The American capitalism based on the advances of the Second Industrial Revolution is considered to raise the British capitalism boosted by the First Industrial Revolution to a higher level because not only America had a bigger market than Britain did, but also major innovations in production method and management practice through rationalization and scientification took place first in America. Frederick

Taylor, also known as the 'Father of Business Management,' used to work for some time at a factory and published *The Principles of Scientific Research* based on his experience in 1911, laying the foundation for modern management and giving birth to 'Taylorism' after his name.

While Taylor brought about innovative breakthroughs in terms of theory, it was American businessman Henry Ford who created a new milestone in terms of the actual production process. As an engineer, he established a company in 1903 (Ford Motor Co) and introduced the 'assembly line' method, opening the 'mass-production era' in the 20th century. He coined a new term 'Fordism', meaning the practice of lowering prices by mass production and paying high wages. In reality in the process of producing the 'Model T,' he put a mass-production system in place that resulted in its prices being reduced by half and wages being doubled.

Consequently, the United States became genuinely the world's center of capitalism throughout the Second Industrial Revolution in the late 19th century and the early 20th century. In the process, its vast territory, abundant natural resources, and ever-growing population of immigrants served as the basis of economic growth, and the entrepreneurship that is creative and does not fear risks was behind the Second Industrial Revolution and the development of the American capitalism.

Germany was at the forefront of the Industrial Revolution in the European continent. However, unlike Britain where the Industrial Revolution was led by the private sector and developed gradually for a long time, the industrial revolution in Germany was led by the government and spread in a short time. Since Prussia of the 'Iron Chancellor' Bismarck unified Germany politically in 1871, its industrialization accelerated rapidly.

In Germany, over 30 states including Prussia established a customs union in 1834, there were many craftsmen with craftsmanship, and investments in railroad continued to be made. Also, its citizens were enthusiastic about education, and the tradition of universal banking also working as an investment bank was established.

This means that even before 1871, it had an appropriate ground for economic development and the industrial revolution. In this situation, the politically unified Germany was a catalyst for rapid economic growth. As a result, the international competitiveness of Germany's industries dramatically soared, and this led its economy to rapid growth. By 1913 when the Second Industrial Revolution drew to an end, Germany emerged as one of the world's major exporters and became the leader especially in the areas of machinery, steel, pharmaceuticals, and chemicals.

The political and social backdrops against the introduc-

tion of social insurance were that, as democracy advanced which granted workers the right to vote, the political parties competed for winning over their support. In Britain, efforts were continued to make laws like the Factory Act to improve working conditions of workers, and Germany introduced social insurance as a means to protect workers from social risks such as disease, unemployment, and aging.

Social insurance, which can be seen as heralding a modern welfare state, was first introduced not in Britain, the birthplace of the industrial revolution, but in Germany, a latecomer of it. Germany achieved new milestones in social welfare policy by introducing sickness insurance in 1883, work accident insurance in 1884, and old-age pension in 1889. Of several reasons, explaining why social insurance was first adopted in Germany, the most important one was its chancellor Bismarck's outstanding vision for the country management and political leadership.

To hold the ever-growing socialist group in check, Bismarck enacted the 'Socialist Suppression Act' in 1878 and later in the 1880s adopted the social insurance system in an attempt to realize a 'welfare monarchy' aiming to address the challenges from liberalism and the bourgeoisie and prevent a socialist revolution at the same time. Germany's social insurance scheme rapidly spread and covered all of the self-employed and office workers by 1911. After originating in

Germany, the social insurance system spread to other parts of continental Europe and Britain over time.

The social insurance scheme in Britain was promoted by the Liberal Party after it won the election in 1906, 20 years or so later than Germany. Astonished by the Labour Party, which secured hefty 29 seats in the 1906 general election, the Liberal Party introduced a non-contribution old-age pension for poor old people aged 70 or older in 1908 and a national health insurance system based on flat-rate of contribution and the world's first unemployment insurance in 1911, in a bid to show the citizens that they worked for the interests of the underprivileged.

Started with social insurance, the social welfare system evolved into a full-blown social security system following the two world wars and the Great Depression, and historians coined the term 'welfare state'. The term 'social security' was first used in 1935 when the Social Security Act of America was created. The Atlantic Charter signed between Britain's Prime Minister Churchill and U.S. President Roosevelt in August 1941 amid the World War II stipulated in Article 5 that "we pursue international cooperation in the economy to improve working conditions and secure economic progress and social security," making social security part of the shared war goals of the allied forces. To make this more concrete, Churchill launched the 'Committee for Social Insurance and

Allied Services' chaired by Beveridge, and in 1942, the Beveridge Report was submitted, which set out a blueprint of the British welfare state.

Some Conservatives at that time criticized the Beveridge Report, labeling it as an unrealistic utopia, but Churchill promised social security for all 'from cradle to grave' in his aired speech in March 1943. Upon the Labour Party coming to power in 1945, the report's recommendations were implemented through a series of laws. In 1945, the Social Security Administration was created, followed by the legislation of the 'Family Benefits Act,' the 'National Insurance Act' on Work Accident and National Health Service in 1946 and the 'National Assistance Act' in 1948. In short, the Beveridge model served as a framework of the country's social security program and became a role-model for all Western countries pursuing a welfare state.

From a historical viewpoint, the period of 1920-1945 is seen as the 'development phase of welfare state' and the period of 1945-1975 as the 'expansion phase of the welfare state.' During the former period, efforts to build a welfare state on the part of the developed countries continued through social insurance systems despite the two world wars and the Great Depression. This led the ratio of welfare beneficiaries in population to soar from 27% or so in 1919 to around 60% in 1945 and welfare cost share in GDP to exceed 5%.

The welfare states reached another turning point as the Second World War ended. Then welfare systems, budget, and scope of beneficiaries all rapidly grew. Ratios of welfare beneficiaries reached levels close to 100%, and welfare budget share in GDP sharply increased to 20-30% from 5%. The development of welfare states was possible because of the realization of 'Politics of Consensus,' which combined economic growth-full employment-welfare state in a package. In other words, the state-capital-labor cooperation resulted in profits for capitalists, employment and welfare benefits for workers, and revenue increase for the state.

The Third Industrial Revolution and Social Welfare 3.0

The Third Industrial Revolution took place in the late 20th century in the form of the 'IT revolution'. Geographically, the First Industrial Revolution was led by the United Kingdom, the Second Industrial Revolution was centered on the Eastern United States including New York, and the Third Industrial Revolution started from Stanford University and neighboring 'Silicon Valley' in the West.

Improved computer capabilities and the appearance of the Internet were at the heart of the Third Industrial Revolution. The first computer developed in 1946 was 3 m high and 50 m long and cost millions of dollars. However, the age of personal computer (PC) came as in 1971, Intel began

to produce computer chips that could work 12 times better than the first computer and cost merely 200 dollars. The Internet, another IT revolution, was first developed in 1977 for military purpose. In 1991 University of Illinois research team succeeded in developing a program which even non-expert users could use, having the Internet Age wide open.

The development of digital technologies is boosting new technological advances in a variety of fields and further forming new industries. Digital technologies have given birth to new industries such as mechatronics combining with machine technology and bio-engineering fields as a result of combining with biology. They also have been the driving force for engineering such as textile and steel and for humanities fields such as finance and education to create new values. Dramatic advancement of the network technology has helped IT services evolve into 3D and super-space types, and various transmission media have been developed, with many related components and devices industries growing faster.

Digital technologies, especially the development of the Internet, have made e-commerce possible beyond the constraints of time and space, diminishing the role of the middlemen and initiating a major change that makes the world a large single market. The service sector is also influenced greatly by digital technologies. The financial market is ex-

panding its realm beyond borders, and online education over the cyberspace is accelerating the spread and accumulation of knowledge.

The development of digital technologies has not only contributed to the acceleration of technological development and the enhancement of productivity but also taken the existing rules of the economy to another level. One of the most important changes in the digital economy is that the gravity of the economy moves from producers to consumers. This is because the competition among producers is getting fiercer as the world has become a huge single market and therefore it is hard for producers to maintain their monopoly status any more. As a result, consumers are enjoying more choices as they can obtain more information on products and services online.

Moreover, the dissemination of information fueled by the advances of digital technologies has raised awareness of voters about political issues, making authoritarian politics based on information control rather ineffective. Therefore, the digital revolution has boosted the democratization of politics. The 'Jasmine Revolution' in the Arab world in 2012 provides a good example of this kind. During this period, the press was controlled by the dictatorial regime, but Social Network Services (SNSs) such as Twitter and Facebook had a huge influence in forming a public opinion and organizing a mass rally.

Digital technology's advances have brought about diverse changes in society. For example, communicating over the cyberspace makes the formation and operations of NGOs easier, e-government services greatly enhanced the efficiency of government services for citizens, and the possibility of impromptu choice via online has been creating the age of sensibility where sensible thinking comes before rational thinking. Accordingly, these digital innovations increase social dynamics and thereby accelerate political and social changes.

Two oil crises in the 1970s brought capitalism and welfare states of the West that had been blooming since the 1950s to new challenges such as slowing down their economy, increasing the pressure of inflation, and leaving the Western states behind the emerging industrial countries such as Japan and other East Asian countries in international markets. Also, these Western welfare states suffered from skyrocketing pension payments and healthcare spending due to the rapid aging of the population, while failing to collect enough insurance premiums due to the relative decrease in the number of working people and slowdown of economic growth rate.

Growing unemployment due to the economic slowdowns also caused increase in unemployment benefits while the sum of insurance premiums collected decreased relatively. Also, the continuing increase of unemployment benefits during the economic boom resulted in a contradiction that

no significant difference in real income existed between the employed and the unemployed, raising doubt on the welfare state model. This made it evitable to carry out partial or whole shake-ups of the existing welfare state model maintained in Europe and America.

Amid this social atmosphere, the Conservative Party of Thatcher came to power in 1979 in Britain, and in 1980, President Reagan of the Republican Party took office in the United States. Thatcher pushed forward Hayek's economic liberalism and the Reagan administration adopted the 'neo-liberal' economic policy based on Friedman's monetary theory. The neo-liberal welfare supporters saw too generous welfare policies as the causes of economic hardships, which, they argued, in turn made the nation collapse financially and the motive of work fall. Thus, they insisted that government intervention be minimized and the loose welfare budget be reduced.

Ironically, it was Britain which took the first initiative in the reform of welfare state, that was based on the Beveridge Report. Thatcher responded strictly the ongoing coal mine labor unions, privatized public firms, and pushed forward entrusting welfare services to the private sector or 're-commodification'.⁶ The welfare state reforms initiated by the Thatcher government were completed by Blair of the Labour Party. This shows there was a widespread consensus among people about the welfare state reforms in the United Kingdom.

Since coming to power in 1997, the Labour Party led by Blair announced the 'New Contract for Welfare,' giving birth to a new concept 'workfare'. Under this principle, Blair carried out reforms that divided public pensions into two phases: basic pension and earnings-related pension and implemented new programs such as the 'New Deal for Young People' which made vocational training and employment of jobless young people mandatory. These welfare reforms were based on British sociologist Giddens' new way of thinking, that is, 'The Third Way', which stresses the acceptance of the general trend of globalization as well as the active role of government. Since then, Britain's welfare state reform efforts reached out to the United States and other welfare states in Europe.

Despite such reforms by the welfare-advanced countries, welfare expenses are in effect growing continuously. This is because of the rapid increase in pension spending as a result of population aging and the increase in unemployment benefits due to ever-growing unemployment rates. Besides, the pro-welfare camp has been expanding, making it hard to cut the welfare budget in reality, and politicians often attempt to raise the welfare budget to please voters.

Generally speaking, once being put into place for a certain period, policy or system is extremely hard to undo. In

⁶ The policy of bringing the workable beneficiaries of welfare programs back into the labor market is called 're-commodification'.

particular, existing beneficiaries tend to strongly resist any attempt to reduce or abandon a welfare policy or program, so it can become a very tricky political issue. This is why the welfare reforms since the 1980s have been a partial modification or rationalization of the welfare state models rather than a complete change.

‘Social Welfare 3.0’ summarized as a reduction or rationalization of a welfare state began in the 1980s before the Third Industrial Revolution took place. ‘Social Welfare 1.0’ and ‘Social Welfare 2.0’ started to solve the political and social problems surfacing throughout the Industrial Revolutions, while ‘Social Welfare 3.0’ was a new strategy for a ‘sustainable welfare state’ as a solution to ‘Social Welfare 2.0’, a welfare state model which had been developed over a long period of time spanning almost a century, as it was hit badly by the stagflation due to the two global oil crises and the worsening welfare budget situation driven by the rapid population aging internally.

Pierson⁷ categorizes the welfare state reforms since the 1980s largely into three types: (1) de-commodification to return beneficiaries to the labor market, (2) cost control through welfare spending reduction, and (3) restructuring to enhance the efficiency through rationalization and update of programs. According to Pierson, it is highly likely that liberal welfare states such as Britain and America focus on re-com-

modification through marketization, conservative welfare states such as Germany and France on cost control aiming to reinforce public welfare, and social democratic welfare states like Sweden and Denmark on rationalization to raise the efficiency of welfare programs.

2. The Fourth Industrial Revolution and its Socio-Economic Impacts

The Fourth Industrial Revolution

Early in 2016, Klaus Schwab, the chairman of the World Economic Forum in Davos, presented the challenge of the ‘Fourth Industrial Revolution’ for the first time in the international community. He assesses that technological innovations emerging in a wide range of areas such as AI, robotics, IoT, nano-technology, and bio-engineering are developing at a blistering pace, causing a major paradigm shift in the way we live and work as well as the advent of new business models and the destruction of existing systems. Then he labels this significant transformation as the Fourth Industrial Revolution. While historians have not recognized it officially yet, the Fourth Industrial Revolution is perceived as a phenomenon in which the digital revolution is combined with

7 P. Pierson (2001), *The New Politics of the Welfare State*, Oxford University Press

other fields such as mechanical engineering and biology, and generates a synergy effect.

Schwab⁸ presents three types of technologies driving the Fourth Industrial Revolution: 1) physical technologies such as autonomous vehicles, 3D printing, advanced robotics, and new materials, 2) digital technologies such as the Internet of Things (IoT), blockchains, and digital platforms, and 3) biological technologies such as genetics for genome analysis and synthetic biology manufacturing organisms. He argues that this widespread technological revolution goes so deep and wide that the resulting economic, social and cultural changes will be quite significant and unpredictable.

It seems that Schwab stresses the importance of the Fourth Industrial Revolution because he as a German is influenced by the concept of 'Industry 4.0', which is underway in Germany. 'Industry 4.0', with its concept first introduced in the 2011 Hannover Exhibition, is an effort of Germany to raise its international competitiveness by fusing IT technologies across all processes of manufacturing through close collaboration among and between industry, academia, and government as a move to ensure its leadership in manufacturing. It is based on a belief that Germany traditionally raced ahead in manufacturing but fell behind other countries such as the United States during the period of Third Industrial Revolution.

Several characteristics can explain Industry 4.0 of Germany.⁹ First, Industry 4.0 was launched by the full support from the German government and is evolving continuously with the help of the government's ongoing policy support. More importantly, such support has been provided fairly efficiently. Second, at the heart of Industry 4.0 there is an industry-wide effort by trade associations, with a focus on flexible on-demand production, production planning and information sharing of management divisions, and interoperability with different systems. Third, all this is based on the fact that technological advances such as IoT and business models to sell standardized networks are being made through the academia-industry collaborations.

With their experiences in manufacturing, Germany's flagship firms such as Siemens and SAP are at the forefront of Industry 4.0. Pursuing the efficiency and flexibility in manufacturing at the same time, German companies are driving the Fourth Industrial Revolution forward with Cyber Physical Systems (CPS) that combine reality and virtuality. For example, a Siemens smart factory in Amberg, Germany has succeeded in reducing defects to 1/40, saving energy consumption by 30%, and shortening its product delivery time

8 Klaus Schwab (2016), *The Fourth Industrial Revolution*, World Economic Forum

9 In-sook Kim & Yu-seon Nam (2016), *The Fourth Industrial Revolution: A New Wave of Future*, Heute Books

by half. In addition to Industry 4.0, Germany is also pushing forward 'Work 4.0' policy initiatives that aim to improve wage levels and working conditions and also to raise productivity through dialogues between the employer and the trade union.

The concept of Industry 4.0 in Germany is spreading to the other EU member countries under the name "Horizon 2020." The EU seeks to solve social problems such as polarization and aging that the EU faces beyond optimizing the manufacturing industry. The United States presents nine strategic opportunity areas, including self-driving cars, in the 2015 'New Strategy for American Innovation.' The United States places emphasis particularly on the Industrial Internet, 3D printing, robotics, and AI, dreaming of a revival as a manufacturing powerhouse. GE is leading the Industrial Internet Consortium (IIC), called Predix, which puts smart features on the machines in the field. The project aims primarily to innovate at the manufacturing sites, as 'Industry 4.0 does in Germany.

To catch up with the United States in the Fourth Industrial Revolution, Japan announced the 'Super-Smart Society Strategy' in January 2016, followed by the 'AI Industrialization Roadmap' in November 2016 and the 'New Industrial Structure Vision' in May 2017. Japan is pursuing a new Fourth Industrial Revolution strategy in which all ministries

are participating under the leadership of the Prime Minister's Office, boosting regulatory innovation and the use of data. As a result, Fujitsu has reduced production delay by a fifth through virtualizing its production environment. Japan is also promoting 'Society 5.0,' centered on the robot technology that it is boastful of.

China is striving to shift its national growth paradigm from 'Made in China' to 'Created in China' through its 'China Manufacturing 2025' plan. The plan aims to take China's competitiveness to the levels of United States, Germany, and Japan by 2019 and achieve the world's number one by 2035. China emphasizes the concept of 'innovation' the most and emphasizes boosting startups for this purpose.

As such, countries around the world are now pouring their national capacity to stay ahead of the competition for the Fourth Industrial Revolution. To join this race, South Korea formed the 'Presidential Committee on the Fourth Industrial Revolution' right after the inauguration of the Moon Jae-in administration and released the 'People-Centered Response Plan for the Fourth Industrial Revolution to Promote Innovative Growth' in November 2017. The plan seeks to use a new Fourth Industrial Revolution strategy to solve problems such as capital input-driven growth and deepening polarization in income and industrial structure and to realize productivity-centered industrial restructuring and better

quality of life for all.¹⁰

Korea's Fourth Industrial Revolution strategy consists of three categories: First, securing intelligent technological competitiveness, driving force for innovative growth, and technological expertise as a growth engine through R&D system innovation; second, creating an industrial infrastructure-ecosystem by building super-connected intelligent networks, strengthening production sharing bases, improving new industry regulations, and making small and medium-sized ventures and regional centers growth engines; third, responding to changes in society in the future by supporting growth of core talent, innovating education for future society, expanding job safety nets, and strengthening cyber dysfunction and ethics.

Socio-Economic Impacts of the Fourth Industrial Revolution

Since the Fourth Industrial Revolution is ongoing, it is hard to analyze its economic and social impacts precisely, but we still may presume its direction and scale. What is certain is that the ripple effect of the Fourth Industrial Revolution will be much greater than the previous three industrial revolutions, and its content and direction may vary depending on how we react. Also, if we work harder, its positive effects could be maximized with the negative effects being minimized. For this reason, most of the developed countries have

paid much attention to it and prepared and implemented measures at the pan-governmental and national levels.

First of all, the commercialization of technologies related to the Fourth Industrial Revolution and the business models that apply them will be the basis for new economic growth. Intelligent technology represented by smart factories is increasing the productivity of all sectors and laying the foundation for new growth. For example, the Siemens plant in Amberg, Germany, as mentioned above, has increased productivity by 7.5 times by increasing the level of automation by more than 75% after building a smart factory system using intelligent robots, AI and big data. A Harvard Medical School research team found that the error rate for breast cancer readings was 7.5% for AI and 3.5% for humans, but the error rate dropped to 0.5% when humans and AI worked together. Besides, introducing intelligent transportation systems can significantly reduce traffic jams and save drivers time and energy. By incorporating an intelligent transportation system, the City of Pittsburg, USA has witnessed a reduction of 25% in vehicle driving time and 40% in signal waiting time.

In the era of the Fourth Industrial Revolution, data is emerging as a new factor of production in addition to labor

¹⁰ The Fourth Industrial Revolution Committee (Nov 2017), *A People-centered Fourth Industrial Revolution Response Plan for Innovative Growth*, Joint TF of related ministries

and capital. In Korea, it is expected that if the big data held by the Korea Health Insurance Corporation and the Korea Health Insurance Review and Assessment Service are used appropriately, the medical technology will be able to develop drastically, resulting in the rapid growth of the healthcare industry and the subsequent improvement of national health. The Fourth Industrial Revolution technologies can improve the quality of life by solving chronic social issues. For example, using care/nursing robots and wearable devices that can support physical activities will make it possible to improve the welfare level for the disabled and the elderly substantially. In China, AI is used to prevent suicide. AI analyzes SNS posts and if a sign of suicide is detected, it sends a message to encourage the person to take psychiatric care and counseling, of which accuracy reaches 92.2%.

The Fourth Industrial Revolution is fundamentally changing the economic and social paradigm, beyond improving the efficiency of production and the quality of life using these new technologies. Futurist Jeremy Rifkin provides various blueprints for a future society. First of all, Rifkin boldly predicts that IoT, 3D printing, open platforms, and renewable energy that are developing as a result of the Fourth Industrial Revolution will bring down the existing system of market capitalism where businesses pursue profits by making marginal cost of economic activities zero, giving rise

to ‘collaborative commons’ that emphasize social values.¹¹ Also, according to him, the convergence of the Internet and renewable energy technologies will lead to a new era based on sustainable economic systems and horizontal power structures, bringing the era based on fossil fuels to an end.¹² He emphasizes the importance of human empathy above all else in this new era.¹³

The claim that the Fourth Industrial Revolution will raise the working paradigm of human society to a higher level has also been raised among Korea’s futurists. The KAIST Moon Soul Graduate School of Future Strategy defines the Fourth Industrial Revolution as a convergence revolution between digital and analog, and projects that the convergence revolution in technology will lead to the spread of the sharing economy through the fusion of offline where the principle of proprietary prevails and online where the principle of sharing does.¹⁴ They argue therefore that concepts of the previous industrial revolutions, summarized as ‘segregation and confrontation,’ will evolve into ‘convergence and circulation’

11 Jeremy Rifkin (2014), *The Zero Marginal Cost Society: the Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism*, St. Martin’s Griffin

12 Jeremy Rifkin (2011), *The Third Industrial Revolution: How Lateral Power Is Transforming Energy, the Economy, and the World*, Palgrave MacMillan

13 Jeremy Rifkin (2010), *The Empathic Civilization: The Race to Global Consciousness in a World in Crisis*, Jeremy Tarcher Inc.

14 KAIST Moon Soul Graduate School of Future Strategy (2017), *The Fourth Industrial Revolution of Korea: A Huge Wave of the Fourth Industrial Revolution - A Model for Korea*, KCERN

in the era of the Fourth Industrial Revolution, leading to a philosophical revolution of the virtuous cycle.

Side Effects of the Fourth Industrial Revolution:

1) Deepening Polarization

Contrary to the optimistic outlook that the Fourth Industrial Revolution will bring about a humanistic revolution that is different from the previous industrial revolutions, many people express a pessimistic view that it will cause social problems such as deepening polarization, employment cliff, and dehumanization. The most important of these is polarization. Empirical studies on income distribution agree that polarization has continued to worsen since the 1990s when the results of the Third Industrial Revolution began to affect all aspects of society.

The issue of worsening income distribution was first raised in the 2008 OECD report.¹⁵ and reaffirmed in its 2011 report.¹⁶ The report points out that income distribution in OECD countries continued to deteriorate over the two decades before the 2008 global financial crisis. For example, the income growth rate of the top 10% in this period was 1.9% per year, while that of the bottom 10% was only 1.3%, making the former's income was nine times higher than the latter as of 2008. By country, the distribution of income in the Nordic countries was relatively better than the OECD average, whereas the income

multiple for Italy, Japan, South Korea, and the United Kingdom was 10 times, a bit worse than the average, 14 times for Israel, Turkey, and the United States, and 27 times for Mexico and Chile, which means that distribution became worse. The report points out that the main reason for the worsening of income distribution in OECD countries is the widening wage gap. This means that the wage gap widened because the benefits of technological development in the Third Industrial Revolution were uneven among individuals, leading to worsening income distribution.

The seriousness of distribution issue was recently raised again by Thomas Piketty.¹⁷ He argues that as profits to capital exceed economic growth, this makes the concentration of wealth worse, which has been a general tendency since the 1980s in America and Europe. He adds that this will lead to the excessive intergenerational transmission of wealth and in turn low growth and worsening income distribution. This is why Piketty empathizes the need for introducing wealth taxes to prevent it from happening.

Worsening distribution is causing indignation among working class. 'The Occupy Wall Street Movement' that occurred during the global financial crisis is a good example. Originat-

¹⁵ OECD (2008), *Growing Unequal*

¹⁶ OECD (2011), *Divided We Stand: Why Inequality Keeps Rising*

¹⁷ Thomas Piketty (2014), *Capital in the Twenty-First Century*, Harvard University Press

ing in Madrid, Spain in May 2011, the movement spread to the United States and around the world and took place in more than 95 cities in 82 countries. Under the slogan ‘We are the 99%’, it argued that the world’s wealth is concentrated in the top 1% and their greed caused the 2008 global financial crisis.

The statistics used by the Occupy Wall Street activists are based on the report¹⁸ released by the US Congressional Budget Office. According to this report, the income of America’s top 1% soared 276% from 1979 to 2007, but that of the middle 60% increased by only 40%. Particularly as of 2007, the top 1% owned 42.7% of financial assets, which is a big shock.

It turns out that this is the case in Korea as well. Professor Kim Nak-yeon’s research shows that from 1998 through 2010 in Korea, the income share of the top 1% jumped from 6.97% to 11.50%, the top 0.1% from 1.79% to 4.08%, and the top 0.01% from 0.57% to 1.61%.¹⁹ The Maeil Business Newspaper writes about the anger level in Korean society in a special feature entitled “Korea is Now in an Era of Anger”.

“Koreans are angry. Not only the poor and those who are complaining about society, but also the rich and even the privileged are expressing their anger in their own ways. Everyone is angry whether they are young, middle-aged or old. It is a widespread sentiment in Korean today. Its destructive energy spreads and threatens to undermine the foundation of Korean capitalism that has been sustained by economic growth.”

Koreans’ anger has led to low happiness levels, high suicide rates, and a super-low birth rate in the country. The Gross National Well-being Index of Korea released by the OECD has continued to fall: 24th in 2011, 28th in 2015, and 31st in 2017, and is ranked the lowest among the 32 countries surveyed. In the UN World Happiness Report, Korea’s happiness index stood at 56th out of 155 countries, with 5.84 points out of 10 as of 2017. On the other hand, Korea’s suicide rate is 31.7 per 100,000 people, maintaining the world’s highest level for a long time. Also, Korea’s birth rate is 0.9 as of 2019, which is also the lowest in the world. These statistics clearly show how serious these issues are for Koreans in the era of the Fourth Industrial Revolution where distribution is expected to get worse in the face of fierce competition, urging proactive and wise actions to address them.

Side Effects of the Fourth Industrial Revolution:

2) Employment Cliff

The second side effect expected in the Fourth Industrial Revolution is the employment cliff. Historically, every industrial revolution caused the crisis of existing jobs. The first

18 Shaw, Hannah, Stone & Chad (2011), “Tax Data Show Richest 1% Took a Hit in 2008, but Income Remained Highly Concentrated at the Top. Recent Gains of Bottom 90% Wiped Out” Center on Budget and Policy Priorities, July 30

19 JoongAng Ilbo, “Even Korea’s 1% feels deprived when comparing themselves to the 0.1%”, May 4, 2012

industrial revolution opened the era of mass production of cotton fabrics as the steam engine was used for production, which left workers in the cottage industry in rural areas unemployed. The rural craftsmen who lost their competitive edge became jobless or factory workers. Also, complaints of factory workers were aggravated by the worsening wages and working conditions due to the Napoleonic Wars (1797-1815) and recession.

Eventually, in 1811, the Luddite Movement occurred in Nottingham, England, where workers and the jobless raided factories and destroyed machines and attacked factory managers. The movement spread to Yorkshire in 1812 and Lancashire in 1813. The British Parliament enacted legislation for its suppression and the government dispatched the military to crack down. As a result, the movement was suppressed but this is the first case in which workers who faced difficulties during an industrial revolution resisted technological innovation and the introduction of machines.

The movement was not only a resistance to machinery and technological innovation itself, but also a rebellion against the poor working environment of the time. Thus, as social insurance was introduced, the foundation for the welfare state was being laid, and significant progress was made in terms of workers' rights, a similar radical opposition of workers never occurred thereafter despite rapid technologi-

cal innovations and the use of new machines in the industrial revolution process. This is because the Second Industrial Revolution led to enhanced productivity and a better working environment through the introduction of the mass production system and the use of electricity.

The Third Industrial Revolution made society rapidly become digital. The commercialization of computers and the Internet greatly changed the way businesses operated, and office workers had to acquire new capabilities. Workers who succeeded in doing so earned a corresponding reward, but those who did not have to accept low wages and sometimes faced unemployment. The polarizing labor market has led to deepening income distribution, and the phenomenon is still in progress and ever-worsening as the Fourth Industrial Revolution is underway now.

Since the Fourth Industrial Revolution is a convergence revolution that combines technologies of many hi-tech disciplines, it is more difficult for workers to adapt to it than in the third. The Korea Employment Information Service found in its 'Workers' Awareness about the Impacts of the Fourth Industrial Revolution' survey that 44.7% of the respondents said that jobs will be reduced in their industry because of AI and hi-tech technologies, while only 13% said that jobs will be added.

Unskilled workers are expected to bear the brunt of the Fourth Industrial Revolution because simple tasks and repeti-

tive tasks are very likely to be replaced by robots or AI. For example, cashiers will disappear at stores, and it is highly likely self-checkout kiosks will take the place of human cashiers. Already, Amazon in the USA and Alibaba in China have begun the era of cashier-free convenience stores. Also, when driverless cars become commercially available, the majority of drivers will lose their jobs. Many other manufacturing jobs are also highly likely to be replaced by robots. PwC, an accounting consulting firm, predicts that by 2030, 38% of jobs in America, 35% of jobs in Germany, 30% of jobs in Britain, and 21% of jobs in Japan will disappear. Many of these will be low-skilled jobs in the lower-income brackets. This will eventually lead to serious distribution and poverty issues.

Skilled jobs are also affected by the Fourth Industrial Revolution. As the development of AI breaks down the barriers of languages, translators will face a job crisis. Also, when an AI chef cooks better than a human chef, chefs will be in trouble. Even high-skilled jobs such as doctors and lawyers are expected to be at risk. Goldman Sachs has developed a stock trading AI and reduced the number of traders from 600 to just 2. The AI doctor developed by IBM turns out to have a 96% diagnostic accuracy, higher than a human doctor. AI lawyers at U.S. law firm BakerHostetler review 100 million cases per second and recommend the most appropriate case. The unmanned pharmaceutical system also automates 97%

of prescription processes of U.S. pharmacies and hospitals. As a result, 350,000 prescriptions have been made without error over five years since the introduction of the system.

Jobs thought to be at risk in the era of the Fourth Industrial Revolution have three characteristics.²⁰ First, they are uniform and repetitive enough to be easily replaced by AI or automation. Second, AI or automation is cheaper than labor costs. Third, they deal with tasks that AI can do better than humans. But jobs that require creativity or planning skills or tasks that need communication and empathy with people will be difficult to replace with AI.

The Fourth Industrial Revolution will result in removing existing jobs but may create new industries and jobs. Examples include IoT, Cloud Computing, Big Data, Mobile, and Artificial Intelligence (AI), and the key technologies that will lead the fourth industry. These technologies representing the era of the Fourth Industrial Revolution will drive the advances of new industries such as drones, 3D printing, VR, AR, fintech, robotics, smart car, security, and healthcare.

We are not sure whether the number of new jobs created by the Fourth Industrial Revolution will be greater or less than the number of disappearing jobs, but from the experiences of the industrial revolutions over the last 200 years or

²⁰ MBN Jobs Report Team (2017), *The End of Jobs in the Fourth Industrial Revolution Era: The Fourth Unemployment*, The Maeil Business Newspaper

so, enough new jobs are expected to be added, so it is unlikely that a ‘fourth unemployment’ will take place in the Fourth Industrial Revolution. The problem is, however, that the pace and scope of restructuring concerning jobs will be much greater than in the previous industrial revolutions. This means that not only should individuals continue to make efforts to adapt to the new environment, but also the government should expand the policy measures that support these individual efforts. A recent McKinsey’s jobs report²¹ gives us a somewhat optimistic message that a ‘fourth unemployment’ will not occur if the government actively implements education and training programs to develop new technologies and industries and enhance individuals’ ability to adapt.

Side Effects of the Fourth Industrial Revolution:

3) Privacy and Dehumanization

In March 2018, the U.S. government began an investigation into Facebook, the world’s largest social media company, regarding its alleged leak of 50 million users’ personal information to a data analytics company during the 2016 presidential election. The US Congressional Judicial Committee asked its CEO Mark Zuckerberg to testify and said it would look into the privacy policies of other social media and Internet firms. Since this is happening not only in America and Korea but anywhere around the world, privacy protection is emerg-

ing as a new social issue in this era of the Fourth Industrial Revolution.

Conflicts between America and China over data, which are called “21st-century oil”, are escalating. When the Chinese government obliged US tech firms such as Apple and Amazon to keep big data they collect in China stored in the country for security reasons, in response, the US government initiated measures to prevent Chinese telecom equipment companies such as Huawei and ZTE from entering the US market. This move aims to block their access to data in the United States through telecom equipment. Tech firm collects huge data from users and foster future industries such as AI, IoT, and driverless cars. Smartphones, communications equipment, and drones collect data on users as well as sensitive data such as the surrounding environment and facilities, causing serious privacy infringement and national security risks. It is another social issue newly appearing in the Fourth Industrial Revolution.

AI is becoming an integral part of corporate management. Almost all types of companies are increasing their investments in AI to forecast demand, analyzing employee behavior and evaluating customer responses. Firms are estimated to have spent \$22 billion in 2017 to merge AI-related companies, 26

²¹ McKinsey Global Institute (2017), *The New World of Work: What the Future of Work Will Mean for Jobs, Skills, and Wages*

times more than in 2015. Google's CEO predicts that AI will play a greater role in human history than fire or electricity. While AI must be a positive contributor to corporate management, AI is likely to cause a great number of privacy issues.

Amazon has developed a wrist strap to monitor warehouse workers every day. Also, Humanyze, a start-up, has invented a badge to monitor the interactions and contacts of its employees at work. Technological innovations in the Fourth Industrial Revolution era, if used well, will greatly contribute to improving the productivity of businesses, but it can also cause serious violations of workers' privacy. To prevent this, it is necessary to make appropriate rules on technological innovations that can violate privacy and to monitor for the public good.

CCTVs are commonplace in our lives and used for various purposes. Police uses them as an essential means to monitor traffic violations and investigate crimes. Some churches in the United States even use CCTVs to record and analyze church members' attendance at worship. However, from a privacy perspective, CCTVs can become a problem in that they can serve as a means for public agencies to monitor all activities of citizens. Recently, technologies that can analyze the human face and collect enormous data are rapidly progressing. As a technology to analyze facial images of a person and find out his/her health conditions and personal-

ity has been developed, privacy will be likely to become far more important than ever before.

In 1999, a science fiction action film *The Matrix* became very popular worldwide. The film depicts human beings under control who do not recognize the real reality in a world where even their memories are input and deleted by AI. Morpheus, who escaped the matrix and became the most dangerous figure for AI, is desperately looking for 'he,' the last hero to save mankind with himself. Finally, Morpheus picks a young man Neo who is an office worker by day and a hacker by night as 'he' and begins a war against AI. The film suggests that technological advances (particularly AI) in the Fourth Industrial age may cause a serious crisis for human society.

In April 2017, Facebook announced the launch of a project that would allow humans to send 100 words per minute from their brain to machine for being typed. In 2016 Elon Musk, the founder of SpaceX and Tesla, established Neuro-link and announced that he would make a brain-computer interface (BCI) to treat people with disabilities by 2021, leveraging ever-evolving brain science. If humans can develop a technology that can sharpen human brain functions, then positive effects will follow, such as the treatment of incurable diseases, but we must also consider about the possibility of our thinking controlled by the one who developed AI as in *The Matrix* in the worst scenario.

3. Characteristics of Social Welfare 4.0 and Policy Challenges

Characteristics of Social Welfare 4.0

‘Social Welfare 4.0’ refers to social welfare practice that combines the traditional welfare state model with community-centered, customized social services, with the concepts of economy and business management added to social welfare to stress the sustainability of the welfare state as well as diverse Fourth Industrial Revolution technologies and big data to realize transparent and smart welfare services. In this regard, characteristics of ‘Social Welfare 4.0’ can be summarized as follows:

- 1) Personalized welfare: Optimal personalized services are provided in every phase of life based on accurate information using big data.
- 2) Flexible welfare: Various forms of employment and service delivery methods are emerging that connect service demand and supply regardless of facility or place using digital platforms.
- 3) Smart welfare: Social workers will be empowered to provide quick and precise services using new technologies such as AI, big data and cloud computing.
- 4) Productive welfare: Combining economy and business

management with social welfare will result in new social-economic effects with a sustainable welfare environment created.

- 5) Social innovation welfare: “Social Innovation Habitat” is built, which increases the efficiency and effectiveness of social services through new ideas to solve social issues.
- 6) Transparent welfare: Using big data centered on social service users (beneficiaries of welfare) will raise the transparency of welfare services by preventing service overlaps, omissions and fraudulent receipt of benefits.
- 7) Sympathetic welfare: A culture of sharing spreads, by showing love and sincerity with human warmth that robots cannot replace.

Social Welfare 4.0 Policy Challenges:

1) Promotion of Social Innovation

As human history has witnessed the industrial revolutions by innovative entrepreneurs who have led the innovation of technologies and business models, social welfare in the face of social problems arising from the industrial revolutions will be led by social innovators who propose new solutions to these problems. Therefore, social welfare in the era of the Fourth Industrial Revolution where the pace of technological innovation is faster than ever should be based on the spirit of social innovation. In particular, bringing about a virtuous

cycle of 'convergence and circulation' rather than 'segregation and confrontation' now requires social innovation in line with the spirit of the times, which is the basic principle of 'Social Welfare 4.0'.

Social innovation means a new idea or business that is successful in solving social problems, and we call those who lead this process a social innovator. During 'Social Welfare 1.0,' the grassroots leaders who led COS and the Settlement Movement in the UK were social innovators. In the 'Social Welfare 2.0' era, German chancellor Bismarck, who implemented social insurance, and Beveridge, who presented a blueprint of the welfare state, were representative examples. In the 'Social Welfare 3.0' era, the British Prime Minister Blair, who put in place the 'workfare' program, and Yunus of Bangladesh, who successfully established the Grameen Bank model he developed, were social innovators who applied economic and business management concepts to social welfare. Those who contributed to the formation of the Social Impact Bond that presented a new social financing technique that emphasizes social impact and others who boosted crowdfunding to enable investors to make social investments also belong to this group.

Since the Fourth Industrial Revolution has just begun, it is still unknown who would be the social innovators who represent Social Welfare 4.0, but anyone who will contribute to

the introduction of universal basic income or the formation of welfare communities, as described below, can also be called a social innovator that represent the era of Social Welfare 4.0.

Social Welfare 4.0 Policy Challenges:

2) Introduction of Universal Basic Income

Recently, interest in universal basic income (UBI) is increasing. Books on UBI have been growing on Amazon in Kindle since 2016, and the Davos Forum, an annual gathering of the world's leading entrepreneurs and politicians, also set the stage for a discussion about it every year since 2018. Recently the Korean political community has started discussions on the merits and demerits of UBI.

The UBI system pays a certain amount of income every month in cash to all citizens. This concept has a fairly long history. C. H. Douglas, an engineer, in 1924 insisted in his book *Social Credit* that all workers should be given their share in technological advances in the form of basic income. He argued that "technology creates a gap between gross production and earned income, so by paying every citizen a 'National Dividend' the government should offset the gap."

Since then, efforts have been made to apply the UBI concept to the real world in various forms. Pilot projects were conducted in the late 1960s in Indiana, Seattle and Denver, USA, and the results were very positive. It turned out

that most participants didn't waste their income, and their children's school enrollment rates also increased. Based on this, George McGovern, a Democratic candidate in the 1972 presidential election, pledged a monthly basic income for all worth \$1,000 as recommended by the economist James Tobin, but it failed to come true as he lost the election.

In June 2016, UBI attracted global attention when Switzerland conducted a referendum to pay all citizens a basic income equivalent to \$3,000 a month. The bill was voted down by 23 percent in favor and 77 percent in opposition, but UBI proponents argued that the Swiss bill unnecessarily caused a lot of opposition because the proposed basic income level was too high. Currently, pilot projects on UBI are being carried out in many countries around the world. Finland has been conducting a pilot project since 2017 that provides the relevant residents with a basic income of \$900 per month, and the Netherlands is also conducting similar pilot projects in 19 cities. Besides, the three-year UBI pilot project began in 2017 in three regions in Ontario, Canada.

Basic income systems are also being implemented in developing countries. In 2016, the charity GiveDirectly launched a ten-year UBI project worth \$30 million in Kenya, and a UBI project giving out \$19 a month has been in place in Uganda since 2017. Previously, UBI pilot projects were carried out in Namibia, Africa in 2008 and 2013, with positive

results. Many of the beneficiaries created jobs for others by starting a business.

A pilot project started in Madhya Pradesh, India in 2010, with very positive outcomes as well. After the UBI project, food consumption rose in the covered households, health got better, and school grades of children enhanced in 68% of the households. Children spent more time at school, family savings tripled, and startups doubled.

UBI is backed not only by liberals but also by conservatives. Liberal scholars support UBI because they believe that UBI is a policy that minimizes the chronic side effects of welfare programs such as reduced workers' motivation to work, while improving the welfare of low-income people, amid exacerbated polarization in the Fourth Industrial Revolution. They argue that Bismarck's social insurance system has the characteristics of insurance against social risks, but UBI is the most ideal social security system to guarantee the social right of all citizens.

Conservatives, on the other hand, support UBI in terms of system simplicity. That's why Silicon Valley's successful venture entrepreneurs endorse UBI and pour huge money to drive its pilot projects. For example, the Cato Institute, which advocates a small government, supports UBI with the logic that "UBI is the simplest and most effective way to achieve redistribution." Venture entrepreneur Sam Altman has been

funding a pilot project from 2016 in Oakland, California, to pay residents \$1,000 a month.

UBI has been shown to have the following advantages: First, because UBI is paid to anyone, there are no side effects that reduce the motivation to work, unlike traditional public assistance programs. Second, the promotion of UBI allows workers to have time to upskill themselves and find a better job, which is a great help in resolving the issues of industrial restructuring that emerge during the Fourth Industrial Revolution. Third, UBI's income stability can boost self-employment by increasing the likelihood of doing business. Fourth, UBI contributes to the activation of non-monetary industries, such as household care, and the increase of consumption. Fifth, UBI is so simple and inexpensive to manage that the efficiency of welfare administration is greatly enhanced. Sixth, the implementation of UBI increases political support due to the expansion of welfare universalism. Seventh, UBI contributes a lot to the better social right for all.

Despite these advantages, the reason why many countries are hesitant to adopt UBI is because of concerns about how to finance the enormous amount of money it needs. For example, introducing a UBI of 15% of the average income requires an additional tax of 15% of income. However, much of this can be obtained by abolishing or reducing existing welfare programs. Once adopted, UBI can make a consider-

able number of policies of income security nature subject to abolishment or reduction. Basic livelihood security program, basic pensions, child allowances, and unemployment benefits may be the first targets.

Also, when the UBI is implemented, the minimum wage system for low-income workers can be abolished, and wage and employment policies can be promoted only by economic logic, not political logic. Also, if UBI is introduced, more drastic pension reform is possible. UBI for children can also be expected to encourage childbirth by serving as a comprehensive child allowance. These advantages of UBI provide a good reason for Korea to consider its introduction in earnest.

Social Welfare 4.0 Policy Challenges:

3) Building Social Welfare Community

A "social welfare community" is the prototype of social welfare. The most important reason for homo sapiens to become the 'lord of all creation' throughout the evolution process competing with other species on earth is that humans are social animals. They were able to share their feelings and views and communicate with each other in words and joined forces to hunt larger and stronger prey than themselves. They also collaborated with dozens of people to develop hunting techniques, and in the process, the language was the key to their success. Historians agree that the 'ability of social coopera-

tion' of homo sapiens played a pivotal in the survival and prosperity of mankind.

Since human history has been developed by social cooperation of humans, social welfare as a means of bringing communities together has played an important role in the evolution of history. In the hunter-gatherer period before the state system appeared, humans lived in groups of tens or hundreds. In the process, social welfare tasks like bringing up children or caring for the elderly would have been seen as the responsibility of the entire community.

The agricultural revolution, which began about 10,000 BC, completely changed human life. Growing crops such as wheat, rice, and corn, and domesticating animals such as goats, sheep, cattle, and horses, humans no longer traveled to find prey but settled in one area. The agricultural revolution made it easier to secure food, and humans lived in larger villages, speeding up the population growth. As the population grew, it became a nation, and in the process, a political ruling class came out. They took the surplus food produced by farmers, giving the farmers only the minimum amount of food needed for subsistence, which caused serious distribution issues to arise. Also, members of a nation lost in a war ended up being slaves. They were at the bottom of the production chain and benefited the least social welfare. On the other hand, having most of the surplus food, the ruling class

utilized it for war and to develop culture and scholarship such as arts and philosophy, which led human history to advance to a whole new different course than before.

This led to the formation of large cities and the emergence of giant empires such as Rome and Babylon. However, social welfare issues in terms of distribution worsened over time as the social classes became fixed in political elites, peasants, and slaves in almost all countries. The political elites dominated produces of the peasants with political power, and the political elites and the peasants alike exploited the slave labor for their political and economic purposes. There was a national poor relief system at that time, simply to reduce social instability caused by growing poverty rather than for the interests of poor people, and provide a minimum amount of food necessary for the poor to stay in work.

Another reason that made it impossible to carry out modern poor relief programs during the agricultural revolution was an economic factor. The agricultural revolution produced surplus agricultural products, but the settlement provided an environment where women could give birth almost every year, increasing the speed of population growth. Consumption per capita did not increase for a long time because economic growth was not much faster than population growth over the thousands of years of the agricultural revolution before the industrial revolution. In other words, al-

most all countries in the agricultural revolution did not have the economic capacity to solve poverty. It was impossible then to expect social welfare to develop in a modern sense.

As the industrial revolution unfolded afterward, economic surplus occurred for the first time in history, and social welfare began to appear at the public and private levels. Also, the right to vote was given to workers, and politicians raced to come up with welfare policies to win their favor. In the 'Social Welfare 1.0' era, the private sector took the lead in social welfare, and into the 'Social Welfare 2.0' period, governments led the construction of a welfare state, driving rapid advances of social welfare. Through the era of 'Social welfare 3.0,' which emphasizes the sustainability of the welfare state by introducing concepts of economics and business management to social welfare, we are now facing the Fourth Industrial Revolution, where technological innovations are spreading across almost all fields beyond IT and at an ever-increasing speed. 'Social Welfare 4.0' needed in a new era is likely to be a hybrid that combines the concept of a 'sustainable welfare state' which has been refined to date with that of a social welfare community as the prototype of social welfare.

The reason for this is that once welfare state at the national level is completed through various social security systems, the next step is to provide customized welfare services suitable for individuals. These customized social welfare services

can only become effective if delivered at regional levels rather than at a national level. It is highly likely that basic services are provided by the government, and additional customized services are delivered in public-private partnerships. In short, Social Welfare 4.0 aims at 'customized welfare society' that is based on communities and public-private partnerships.

Korea created and operated successfully a local community movement, called 'Saemaul' already in the 1970s. The Saemaul project was led by the government taking into account situations of the time and was more of an economic community as indicated in its slogan "Let's be better off" rather than the welfare community. However, the local community that we have to create in this age of the Fourth Industrial Revolution should be a welfare community rather than an economic community, and this task can be accomplished through cooperation between the government and the private sector rather than being led by the government. To this end, a culture of sharing must be established in our society and commitment to social innovation must be prevalent among leaders in society.

The basis of social welfare is altruism, on which a culture of sharing is based. Social welfare in the modern sense began after the Industrial Revolution, but before that social welfare existed in various forms. Even in a hunting-gathering society where humans lived in small groups, they helped the vulner-

2

Why Value-Creating Social Contribution?

able in their families and tribes. Religion scholar Bae Cheol-hyeon²² argues that humans were able to survive and evolve from the Big Bang that happened in 1.7 billion years ago to modern human Homo sapiens 10,000 years ago because they lived together in a community based on altruism. Unlike other animals, humans take a year to walk on their own after birth and in the process, they feel their mother's devotion and love. Throughout additional care for them to live independently for more than a decade afterward, they develop the consideration of others and altruism at the same time.

Psychologist Erich Fromm²³ argued for the first time in the West that humans are by nature not selfish but loving, a symbol of altruism. He refuted Sigmund Freud's theory of finding human nature in sex and emphasized that love is the key element of the human mind. Fromm sees that love, like study and exercise, can be improved through training, concentration, and endurance.

In conclusion, a culture of sharing based on altruism and social innovation based on entrepreneurship and creativity are two pillars that support a 'warm and vibrant social welfare community' needed to open the era of 'Social Welfare 4.0.'

22 Cheol-hyeon Bae (2017), *The Great Journey of Man - From Big Bang to Homo Sapiens, the Only Reason We Survived*, 21st Century Books

23 Erich Fromm (1956), *The Art of Loving: An Enquiry Into the Nature of Love*, Harper & Brothers

Why Value-Creating Social Contribution?²⁴

1. Human Beings Are Social Animals

Citizenship and Social Responsibility

“Man is more of a political animal. But he who is unable to live in society, or who has no need because he is sufficient for himself, must be either a beast or a god: he is no part of a state. Social instinct is implanted in all men by nature, and yet he who first founded the state was the greatest of benefactors. For man, when perfected, is the best of animals, but, when separated from law and justice, he is the worst of all.”

— Aristotle (328 BC), *Politics*

The consensus of anthropologists is that man evolved into the lord of all creation thanks to its sociality. The Homo Sapiens, which appeared 6 million years ago, discovered fire 1 million years ago and began the community life 500,000 years ago by cooking on the fire. They developed the ability to express

²⁴ This article is Chapter 1 of *Social Contribution That Creates Value* (Korea National Council on Social Welfare, 2019) the author wrote.

their inner world through sculpture and painting from 35,000 years ago, learned how to raise animals 14,000 years ago, and the agricultural revolution 15,000 years ago led them to settle down and live in a community. As a result, the first city of mankind appeared in 5,000 BC, and human history continued to evolve through the process of socialization from the scientific revolution 500 years ago to the industrial revolution that took place over 200 years ago. What distinguishes humans from other living things in the process is that they have developed a community and developed technologies and cultures by cooperating with each other and sharing roles, which has greatly improved individual capabilities as well as the relative competitiveness of the human community.

“Man is a social animal” is from ‘Politics’, written by the Greek philosopher Aristotle in 328 B.C. Ancient Greece developed on the basis of the unique city-state of Polis, formed around the 8th century BC, and implemented a direct democracy in which all its citizens participated in politics. Greek political philosophy was based on ethics, and the state was recognized as acting as an “educational institution” that should bring its citizens together ethically in a community and pursued the rule of philosophers respecting reason.

Thus, ancient Greek philosophers such as Socrates, Plato and Aristotle regarded civil society as a synonym for a “good society” in which citizens cooperate and communicate for

common interests and justice. Cicero, an ancient Roman philosopher and politician known to define civil society for the first time, also emphasized citizens’ sound civility and believed that civil society can pursue common good and maintain peace on its own.

Civil society almost disappeared from history when the medieval feudal society began, but it revived along with civility in the Renaissance. Bruce Sievers²⁵ defines civil society as “an active space existing outside the home, state and market and where people voluntarily pursue common interests based on sound civility,” with the following seven key components: 1) charity and philanthropy, 2) public interest and common good, 3) rule of law, 4) non-profit and voluntary organization, 5) personal rights, 6) free expression, and 7) tolerance. Therefore, social contribution activities of humans out of charity and philanthropy are the most integral elements of civility.

Civil society is closely related to the development of liberal democracy. In areas where democratization has not yet taken place, civil society shows a form of systematic resistance to dictatorships that undermine the freedom of citizens. However, in countries where democracy is well established, citizenship is often expressed in the form of social contribution activities of individuals or groups. The reason is

²⁵ Bruce Sievers (2010), *Civil Society, Philanthropy, and the Fate of the Commons*, Tufts University Press

that the existence and development of civil society requires a tolerable social atmosphere that respects various opinions with a system and the rule of law that guarantees individuals' freedom in place and once these basic requirements are met, social contribution activities of citizens are highlighted as the core. Thus, liberal democracy and citizens' social contribution activities are two pillars of civility.

In this respect, it is no coincidence that replacing the role of the government in part, social contribution activities led by the private sector emerged after the Western welfare state model faced economic difficulties from 1980. For example, in Britain, Blair's labor party came to power in 1997 and focused on creating a mutualistic social atmosphere by promoting civil society, presenting a "third way" as a new national goal. Separating from government activities as the First Sector and corporate activities as the Second Sector, Blair's government labeled activities of civil society as the Third Sector and emphasized the importance of the "social economy".

Also, he set up the "Office of the Third Sector" under the direction of the Prime Minister's Office to implement various support policies. After returning to power in 2010, the Conservative government renamed it the Office of the Civil Society and is promoting policies to revitalize the social financial market to foster civil society and spread the concept of social innovation. The Conservative government pursues 'Big

Society', a concept symmetrical to the socialist party's 'Big Government', and in 2010 launched the 'Big Society Capital', which financially supports various social financial institutions to provide institutional support for social contribution activities of individuals.

Overall, it seems that human history from the appearance of Homo Sapiens six million years ago through the industrial revolution over 200 years ago shows that sociality of humans has made Homo Sapiens the lord of all creation, and civility required for individuals in a community has served as the most important basis for social contribution activities.

Altruism and Social Responsibility

"How selfish man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it. Sympathy enlivens joy by presenting another source of satisfaction; and it alleviates grief by insinuating into the heart almost the only agreeable sensation which it is at that time capable of receiving."

— Adam Smith (1759), *The Theory of Moral Sentiment*

Certainly, selfishness and altruism are among the basic qualities of humanity, but there is no agreed view as to which is more important. Liberalism and market economy principles, for example, are based on human selfishness. While market participants are free to pursue profits in their own way,

Adam Smith, who laid the foundations of free market economy, argues that the function of price and division of labor maximizes the efficiency of the economy as a whole. Thus, liberalism and market economy are seen as based on human selfishness. Maximizing the efficiency of the entire economy and the wealth of the state through selfish economic activities of individuals is the theoretical basis for *The Wealth of Nations*, which he wrote in 1776.

However, while stressing the selfishness of man, Adam Smith argues that man feels the pain or pleasure of others, calling this feeling “sympathy.” He adds that sympathy is another form of selfishness of human beings because they feel uncomfortable if they ignore the pain of others. After all, Adam Smith thought that humans sometimes act altruistically because they have sympathy even though they are by nature selfish animals.

It is Richard Dawkins, the author of *The Selfish Gene*, published in 1976, who analyzed human selfishness from a biological perspective. He argues that since “all animals, including humans, are machines made by selfish genes,” human nature is also selfish. Dawkins claims that although genes are fundamentally selfish, but they sometimes work together for the survival of the group. For example, genes as survival machines form a group to avoid being eaten by predators and cooperate with each other.

“We are survival machines – robot vehicles blindly programmed to preserve the selfish molecules known as genes. The selfishness of these genes leads individuals to behave selfishly. The universe that we observe has precisely the properties we should expect if there is, at bottom, no design, no purpose, no evil, no good, nothing but pitiless indifference.”

— Richard Dawkins (1976), *The Selfish Gene*

Dawkins also argues that human society has a ‘culture’ unlike other living organisms and defines its basis as a ‘meme’, different from a gene, and that ‘memes’ are divided into smaller elements as genes are and inherited or newly interpreted in the process and passed on through generations with a higher possibility of survival depending on value. In conclusion, Dawkins added the concept of ‘memes’ acting as ‘transmitters of human culture’ to selfish genes as “survival machines.” As Adam Smith does with the concept of sympathy, Dawkins opens the possibility of the altruistic behavior of humans who are highly social with the concept of ‘memes’.

While Adam Smith’s theory of free market economy and Dawkins’s theory of selfish gene are fundamentally based on human selfishness, both of them see the altruistic behavior of humans as another form of selfishness. However, archaeologist and religion scholar Bae Cheol-hyeon²⁶ actively develops the logic that human altruism is the only reason

²⁶ Cheol-hyeon Bae (2017), *The Great Journey of Man - From Big Bang to Homo Sapiens, the Only Reason We Survived*, 21st Century Books

for human survival in the long process of evolution. Since humans are born immature compared to other animals, they grow up under the care of their loving mother for a long time. He argues that in the process humans come to develop altruism that covers empathy, consideration, kindness, justice, and sacrifice.

“The greatness of humans does not come from a selfish strategy to survive the competition with others; it is gradually cultivated in the process of confronting with themselves.”

— Cheol-hyeon Bae (2017), *The Great Journey of Man*

“Compassion”, which symbolizes altruism, means “mother’s womb” in Hebrew and is expressed as “Allah” in Arabic and as mercy²⁷ in Buddhism. Cheol-hyeon Bae claims that human empathy learned from their mothers has been the basis for altruism, which is the driving force behind great innovations and advances of humanity today. Compassion, the basic principle of altruism, has helped humans become ‘social animals’ and has much in common with not only Christianity’s love, but also with the mercy of Buddhism and the Confucian idea of self-cultivation and rectifying others, in terms of the emphasis on human altruism.

The Age of Empathy and Social Responsibility

“Much of our daily interaction with our fellow human beings is empathic because that is our core nature. Empathy is the very

means by which we create social life and advance civilization. As energy/communications revolutions establish more complex social structures and extend the human domain over time and space, new cosmologies serve like the imaginative bonds of empathy.”

— Jeremy Rifkin (2009), *The Empathic Civilization*

Scholars in the 18th century including Adam Smith explained human altruism with the word ‘sympathy,’ but in the 20th century, altruistic feels of humans were expressed with the term ‘empathy’, which was first used in 1909 by an American psychologist Edward Titchener when he translated the German word ‘Einfühlung (feeling into)’ into English and stemmed from a Greek word meaning ‘passion’ or ‘suffering.’²⁸

Empathy is the ability to share another person’s painful feelings and emotions as if they were your own and has been now widely used in social sciences such as psychology and in the general public. Empathy is different from sympathy in that the latter is a passive feeling, while the former is an active expression of feeling as if they felt the same way as others do. Experts say that humans are born with the capacity for empathy.²⁹

The capacity for empathy of humans appears largely in two forms; one is the ability to understand the feelings of others, and the other is to feel the pain of others and to be

²⁷ Sadness also means sympathy, pity, and being compassionate and showing mercy.

²⁸ Susan Lanzoni (2018), *Empathy: A History*, Yale

²⁹ Helen Reiss (2018), *The Empathy Effect*, Sounds True

willing to help them. As to the former, Daniel Goleman³⁰ argues that rather than reasoning, emotion is more important for leaders and that Emotional Quotient (EQ) can be sharpened through education like Intelligent Quotient (IQ). Also, the capacity for empathy of humans becomes the psychological foundation for social contribution activities, helping people suffering hardships or disasters. This capacity has been confirmed by the latest neuroscience research, too. For example, it turns out the more advanced mirror neurons a person has, the higher score he or she get in empathy test.

Dosan Ahn Chang-ho³¹ established Heungsadan, an institution to train leaders, in 1913 on the principle of 'jeonguidonsoo.' He explained that 'love' is a combination of a mother's affection for her child and sympathy she feels with her child in the process of caring. This has almost the same origin as the word 'empathy' and is in line with Bae Hyeon-cheol's view that human altruism comes from his or her mother's sacrificing love. During interviews of newcomers and trainings at the institution, Dosan placed a particular emphasis on the concept of 'jeonguidonsoo', which means human's 'love' can be deepened through ceaseless effort and training. It is fairly surprising that as early as in the 1910s, he invented a concept comparable to those of the modern psychology and leadership theory and actually reflected it in the

Heungsadan curriculum.

Jeremy Rifkin³² recently has related the capacity of humans for empathy to the socio-economic development levels. He argues that as the economy develops, people's basic needs for livelihoods are met, and education levels are enhanced, with a knowledge-based society established, the empathy capacity of its members is improved so that an ideal society of 'empathic civilization' can come true. He also optimistically predicts that the development of eco-friendly technologies will lead to the restructuring of the fossil fuel-centered energy industry and ultimately to the resolution of the environment issues, calling it the 'Third Industrial Revolutionn.'³³

Ongoing empathy studies have proven that human capacity for empathy can be developed in many ways. For example, given that a baby's empathy capacity develops through the mother's care and love, parents' love and upbringing play a significant role in enhancing the empathy capacity of babies. Daniel Goleman's research³⁴ on empathy showed that

30 Daniel Goleman (2002), *The Primal Leadership: Realizing the Power of Emotional Intelligence*, Brockman, Inc.

31 Sang-mok Suh & Moon-hye Ahn (2010), *Dosan Ahn Chang-ho's Leadership of Love and Altruism: Love and Sharing*, BookKorea

32 Jeremy Rifkin (2009), *The Empathic Civilization: The Race to Global Consciousness in a World in Crisis*, Penguin

33 Jeremy Rifkin (2011), *The Third Industrial Revolution: How Lateral Power Is Transforming Energy, the Economy, and the World*, St. Martin

34 Daniel Goleman (2004), *Emotional Intelligence: Working with EQ*, Bloomsbury

youth's empathy capacity can be cultivated through schooling, stressing how important education is for the development of the capacity for empathy.

Jeremy Rifkin also projects that in an age of economic development and a highly educated knowledge society, all members of the society will have higher levels of empathy. This gives us an optimistic prospect that in the Fourth Industrial Revolution, social contribution activities at the group level will be active among individuals and businesses with the capacity for empathy.

2. Sharing Brings Happiness

Are You Happy?

“Happiness comes from outside and from within. The two are not in contradiction. The true pilgrim fights the evils in the world out there and cultivates the spirit within. The secret is compassion towards oneself and others, and the principle of the Greatest Happiness is essentially the expression of their ideal. Perhaps these two ideas could be the cornerstones of our future culture.”

— Richard Layard (2005), *Happiness: Lessons from a New Science*, Penguin

The goal of national development for countries around the world is changing from economic growth to the quality of life. The World Bank defines inclusive growth as a strategy that considers the speed and content of growth at the same

time, emphasizing the importance of the distributive performance where the fruits of growth are divided evenly to everyone including the low-income group. The OECD is also continuing to develop this field of research, based on the results of a study on the ‘indicator development of the quality of life, published by economists such as Stiglitz and Sen³⁵ in 2010. As part of this endeavour, in November 2018, the ‘OECD World Forum on the Quality of Life’ was held in Songdo, Incheon, Korea.

To keep pace with the global trends, the Park Geun-hye administration set the ‘Era of National Happiness’ as a new national goal in 2013 and President Moon Jae-in also presented a ‘Human-centered Inclusive Nation’ as his government’s goal in 2017. However, the results so far indicated by objective data are not satisfactory. According to the UN World Happiness Report, which has been published every year since 2012, Korea’s national happiness level is in the middle rank, 57th out of 141 countries as of 2018, the lowest at 32nd among the 34 OECD member states. What is worrying is that levels of happiness have continued to fall over the last five years; Korea’s national happiness ranking fell from 41st in 2013 to 47th in 2015, 56th in 2017, and 57th in 2018.

The report lists six key factors that determine national

³⁵ Joseph Stiglitz and Amartya Sen (2010), *Mismeasuring Our Lives: Why GDP Does Not Add Up*, New Press

happiness levels. As of 2018, Korea is ranked at top 4th in the world for 'healthy life expectancy', an objective indicator of happiness. Per capita GDP is in the top 28th, but all other indicators of subjective requirements for happiness are below the middle. For example, its "generosity levels" and "perception of corruption" rank 39th, far below the objective index of income or health. In particular, 'social support' ranked 95th and 'freedom to make life choices' ranked 139th, remaining at the bottom alongside the least developed countries. Even in view of the technical limitations of the indicators set by the UN, our reality is serious in terms of "national happiness" and "inclusive development". This is well proven by the fact that Korea's suicide rate is the highest in the world while its birth rate is the lowest.

Is there any solution to this, and if so, how? It is one of the most pressing and critical challenges for Korea now. There are many studies on economic and health issues and solutions vary. But research on subjective well-being is fairly insufficient, and the solution is unclear. This explains why there is no visible progress made despite the government having continued to raise the issue.

Fortunately, however, research is being extensively conducted on subjective well-being in developed countries such as the United Kingdom and the United States, as well as by international organizations such as the OECD and the

United Nations. For example, a research team on the 'subjective quality of life and happiness' led by the University of London has recently published its findings in a booklet.³⁶ This provides lots of information about the determinants of subjective well-being of UK youth and adults and what are the policy challenges to tackle the issue.

Although the study was based on UK data, the results can be applied to other developed countries, including Korea. The key takeaways of this study are as follows: First, economic factors such as economic growth and inflation affect elections about 40%, while the quality of life as much as 60%, suggesting it is more important. Second, human relationship factors such as the existence of a spouse have a greater impact on life satisfaction than economic variables such as income. Third, mental health is the most important factor in determining life satisfaction. Fourth, children's psychological health is deeply related to their life satisfaction even after they become adults. Fifth, the education environment and school teachers have a great influence on a child's happiness as much as his or her family environment.

Therefore, we now need to encourage research on subjective well-being based on research findings of developed countries such as the United Kingdom and international

³⁶ A. Clark, S. Fleche, R. Layard, N. Powdthavee & G. Ward, *The Origins of Happiness: The Science of Well-Being over the Life Course*, Princeton University Press

organizations such as the UN and OECD, and come up with our own solutions to the problem. First of all, in partnership with scholars and the media, the government needs to raise awareness about ‘are you happy?’ and increase financial support for research and policy development.

Meaningful Life and Happiness

“Self-motivation, rather than external motivation, is at the heart of creativity, responsibility, healthy behavior, and lasting change. Thus, the best way to motivate people is to support their sense of autonomy. Explaining the reasons why a task is important and then allowing as much personal freedom as possible in carrying out the task will stimulate interest and commitment and is a much more effective approach than the standard system of reward and punishment.”

— Edward Deci (1995), *Why We Do What We Do*

Humans constantly strive to find the meaning of life. The pioneers before us and we all are trying our best to find the answer to the question, ‘who am I and for what I live?’ So, when they feel that what they are doing is worthwhile, human beings are more motivated and at the same time they are both spiritually satisfied and better perform in their work.

Viktor Frankl,³⁷ a Jewish psychiatrist who was kept in a Nazi concentration camp during the World War II, witnessed that a motivated person who wanted to live with confidence in the future was more likely to survive in such extreme cir-

cumstances at the concentration camp. From this experience, he established the theory of ‘logotherapy’ to treat patients in mental crisis and applied it in practice. According to him, finding the meaning of life is the most fundamental motivation for a person to live, so it is possible to heal patients by helping them find it.

Besides, empirical research reveals that people who think they live a meaningful life internally are mentally healthier and stronger than those who have external strengths. For example, Edward Deci’s³⁸ in-depth psychological survey of college graduates found that those who see internal values such as meaningful relationships, volunteer services for the community, and self-development as more important led a more energetic and proud life than those who have external strengths such as wealth, honor, and appearance. He also found that those who yearn for inner life were more satisfied with themselves and physically healthier than those who are interested in outward life. This is because if you focus on the inner things rather than the external ones, you become psychologically happier. In addition, the appearance is often determined by other people or by chance rather than by a person’s efforts, but the inner ones depend only on his or her attitude, commitment, and effort so that even if failing to

³⁷ Viktor Frankl (2006), *Man’s Search for Meaning*, Beacon Press

³⁸ Edward Deci (1996), *Why We Do What We Do: Understanding Self-Motivation*, Penguin

reach, the person's feeling of failure is not that great.

Empirical research also shows that discovering the value of life directly leads to happiness. Richard Layard³⁹ argues that those who respect internal values such as independence, positive relationships, internal growth, and meaning of life feel much happier than those who strive for external and temporary satisfaction. For those in pursuit of the value of life are satisfied with their life even if they die today as they are doing what they want to do.

“Happy people enjoy positive emotions, recognizing the meaning of their life. This definition does not mean a moment but a generalized entire experience. One can still be happy overall, while sometimes enduring mental pain.”

— Tal Ben-Shahar (2007), *Happier*, McGraw-Hill

To find out where people are looking for meaning in life, Kent Keith⁴⁰ surveyed 3500 people and found that the majority of respondents were finding the meaning of life through social contribution activities that help others, such as volunteer service and donation, rather than power, wealth, and reputation.

Richard Layard⁴¹ found in his study on the correlation between happiness and economic development that growing incomes often do not raise happiness levels when per capita GDP is over US\$ 20,000 and said that Korea is the best example. He points out that Korea's extremely competitive

atmosphere is the main reason for lower happiness levels of its citizens. Teens are forced into fierce competition for college entrance, college graduates must compete for jobs, and once hired they now need to compete at work for better performance. It is a general consensus of experts that happiness levels in infancy or adolescence has a great influence into the adulthood. In Korea, too much competition for university admission is considered a key factor in low levels of happiness of Koreans, compared to economic and health levels.

Oxytocin and the Happiness of Sharing

“If you love others, you will want to help them. If you love and help others, you will want to treat them ethically. And if you love and help others more and treat them ethically, you will probably get more focused on people and less obsessed with material things.”

— Kent Keith (2010), *Do It Anyway*

Oxytocin, also known as the ‘hormone of love,’ is a hormone that induces labor and gets a pregnant woman prepared for breastfeeding when she gives birth to a baby. Oxytocin is secreted not only at the time of childbirth but also at normal times. Oxytocin is also known as the ‘empathy hormone’ as it

39 Richard Layard (2006), *Happiness: Lessons from a New Science*, Penguin

40 Kent Keith (2010), *Do It Anyway: Finding Personal Meaning and Deep Happiness by Living the Paradoxical Commandments*, New World Library

41 Richard Layard (2011), *The Trap of Happiness: Why We Become Less Happy as We Get More*, Book Hive

increases intimacy with and trust in the other person.⁴² Oxytocin is said to come out a lot when a mother feels a strong emotional bond with her baby but also when a woman feels a mother's affection toward a man. A research team at the University of Zurich, Switzerland, reported that spreading oxytocin into the nose increases faith in the other person. The University of Wales, UK, also found that people with low oxytocin levels scored poorly on the empathy test. Taken together, these findings show that oxytocin is closely related to the empathy capacity, which is the psychological basis of human altruistic behavior.

Oxytocin is also found to be effective in promoting social contribution activities. For example, a group of researchers at Bonn University Hospital in Germany found that when they sprayed oxytocin under participants' noses, donations to refugees increased by 68% from 2.62 euros to 4.41 euros and donations to the community by 82% from 1.99 euros to 3.62 euros. Also, many researchers have found that social contribution activities increase oxytocin secretion dramatically, raising personal satisfaction.⁴³

An Oxford University research team compared a group of volunteers for a certain period of time with a group of volunteers who participated in hobbies and found that the former produced more oxytocin. The finding that volunteer work promotes participants' oxytocin secretion is also true in Har-

vard University's experiments. The participant students were split into two groups, and one group was instructed to watch Sister Teresa's service video, and the other group to watch a general video. Levels of oxytocin increased sharply in the service group. Findings from these experiments suggest that social contribution activities to help others such as volunteer service and donation stimulate the release of oxytocin in the body, which in turn increases a person's happiness level.

3. CSR Activities Are Good for Businesses

Co-opetition and Stakeholder Theory

"Big businesses in a small community will have to spend their resources to solve problems of the community. However, this can only be justified in terms of 'corporate interests' rather than 'corporate social responsibility'."

— Milton Friedman (1962), *Capitalism and Freedom*, Chicago University

In the 1980s, as neo-liberalism was chosen as the political philosophy of U.S. President Reagan and Britain's Prime Minister Thatcher, Milton Friedman's argument that "the only social responsibility of a company is to make a profit" became the mainstream. However, the growing need for a

42 Kerstin Moberg (2011), *The Oxytocin Factor: Tapping the Hormone of Calm, Love, and Healing*, Da Capo Press

43 Loretta Breuning (2015), *Habits of a Happy Brain: Retrain Your Brain to Boost Your Serotonin, Dopamine, Oxytocin, & Endorphin Levels*, Adams Media

new political and economic paradigm since the 2008 global financial crisis made the “stakeholder theory” emerge as a new management strategy that fits for the time.

The stakeholder theory began to be studied at the Stanford Research Institute (SRI) in 1963 and became widely known by the publication of Edward Freeman’s book⁴⁴ in the mid-1980s. Stakeholders are a group of people whose help is indispensable for a company to survive. This includes shareholders, workers and customers, as well as suppliers, financial institutions, and communities having a relationship with the company. The core of this theory is that managers will not be able to develop management strategies necessary for the survival and development of a company unless they understand the needs and interests of these stakeholders.

“Where stakeholders’ interests conflict there is an opportunity for “value creation”. This new narrative about business must also be one of “business in society”. It needs to place a concern with ethics, responsibility, and sustainability on a par with profits. All are important and none can be ignored. More than ever, we need a story about responsible capitalism.”

— Edward Freeman (2010), *Strategic Management: A Strategic Approach* (Preface to the 2010 revision), Cambridge

Stakeholder theory raises the issue of the existing corporate management view in three aspects: First, the premise that competition is the only recipe for the smooth operation of the market economy is not always right. This is because in some

cases cooperation is a prerequisite for corporate survival, and cooperation can be more important than competition in the value creation process. Second, it is also inappropriate to assume that stakeholders are always in competition with each other and that only one of them should be in a dominant position. The reason is that if one stakeholder exerts a dominant influence, not only can the other stakeholders suffer damage, but it can also impede the maximization of the company’s value creation in the mid to longer term. Third, if one stakeholder is in control of business management and the other stakeholders hurt, this is not morally correct. The reason is that in a liberal democratic society when business and capitalist operate in a morally irrelevant manner, the system faces serious social and political problems.

Freeman,⁴⁵ who introduced the stakeholder theory first, summarizes the principles to follow in stakeholder capitalism, the economic system in which stakeholder theory works: 1) The principle of cooperation - in consideration of the social nature of value creation, stakeholders make promises and adhere to mutual cooperation for greater value creation, 2) The principle of participation - to maximize value creation, all stakeholders should actively participate in the

44 Edward Freeman (1984), *Strategic Management: A Stakeholder Approach*, Pitman

45 E. Freeman, J. Harrison, A. Wicks, B. Parmar, & S. de Colle (2010), *Stakeholder Theory: The State of the Art*, Cambridge

value creation process, 3) The principle of responsibility- in order for the value creation process to proceed smoothly, it is necessary to establish a tradition in which all stakeholders are responsible for their action, 4) The principle of complexity – considering that humans by nature are diverse, not uniform, it is critical to respect diversity and emphasize spontaneity, 5) The principle of sustainable creation - we will continuously create new values through cooperation between stakeholders, and 6) The principle of new competition – we need to act with the awareness that cooperation is important but sometimes competition is inevitable.

A similar concept to stakeholder theory is the theory of ‘co-opetition.’⁴⁶ It is an argument that competing participants can maximize each other’s interests through mutual cooperation. The theory of co-opetition is based on the game theory that firms can benefit even more if they take advantage of the strengths of competition and cooperation. The theory’s basic framework is that firms can generate profits by performing better in competition with other firms, but they can coexist with their competitors by creating a new corporate environment in cooperation with them.

“Co-opetition offers a theory of value. It’s a book about creating value and capturing value. There’s a fundamental duality here: whereas creating value is an inherently cooperative process, capturing value is inherently competitive.”

— A. Brandenburger & B. Nalebuff (1996), *Co-opetition*

New theories like the theory of co-opetition are emerging because today’s business environment is much different than before. First, in the new business environment, companies can make more profits through cooperation with other companies than working alone. This is much like how selfish genes cooperate with each other when they encounter a common enemy. Second, firms can work together to expand the market size and value, and profit sharing in the enlarged market is determined through competition among them. Third, co-opetition enables multiple winners in the market, and in many cases a company’s objective is to maximize its own profits and has little to do with other companies’ profits.

Therefore, it can be said that a company creates value basically in a collaborative process because it needs to collaborate with workers, customers, and suppliers and sometimes with other firms to create value. This principle is true not only when entering a new market, but also in expanding existing markets. But internalizing the value created is basically a competitive process. It is like the process of determining the size of a cake is cooperative, but the process of distribution it must be competitive. So ‘co-opetition’ is a concept emphasized in the process of creating value.

⁴⁶ Adam Brandenburger & Barry Nalebuff (1996), *Co-opetition*, Currency/Doubleday

Corporate Social Responsibility (CSR) Has Become Universal

“The decisions and actions of the businessman have a direct bearing on the quality of our lives and personalities. His decisions affect not only himself, his stockholders, his immediate workers, or his customers—they affect the lives and fortunes of us all.”

— Howard Bowen (1953), *Social Responsibilities of the Businessmen*

In 1953 Howard Bowen⁴⁷ first used the term ‘corporate social responsibility (CSR).’ Bowen defined CSR as “the duty of the businessmen to comply with policies and decisions consistent with society’s goals and values.” But Bowen’s argument was perceived as a groundbreaking idea, because at the time most people thought that corporate activities against shareholders’ interests should be restricted by laws. In the same year, A. P. Smith, a sewing machine maker, donated \$1,500 to Princeton University and one of its shareholders filed a lawsuit, claiming that it violated the shareholders’ interests. The court, however, ruled that such donation was not related to the shareholders’ direct interests but was recognized as a category of corporate social responsibility, a landmark decision that CSR was recognized legally.

In the 1960s, as Ralph Nader⁴⁸ launched a powerful social movement in the United States regarding the dangers of cars, CSR developed into a form of consumer movement. In the 1970s, the Club of Rome⁴⁹ asserted that global economic growth would reach its limits due to environmen-

tal issues, which led to the spread of social responsibility issues of companies causing environmental pollution to the international community. In academia, Johnson⁵⁰ said that “management of socially responsible companies must have a balanced view of profits, not just in the interests of shareholders, but in the interests of employees, subcontractors, communities and the country”. Steiner⁵¹ argued that “corporate social responsibility is a philosophy that pursues ‘enlightened self-interest’, different from short-term self-interest, and social interests”

In the 1980s corporate behaviors that failed to meet society’s expectations such as the Tylenol recall in 1982 were revealed by the press, and the idea that companies should have a ‘comprehensive responsibility’ encompassing the environmental responsibility in addition to the existing social and economic responsibilities spread. This idea was organized by Archie Carroll.⁵² CSR implies that companies must fulfill their primary economic responsibility, the secondary legal responsibility, and the tertiary ethical responsibility, as

47 Howard Bowen (1953), *Social Responsibilities of Businessmen*, University of Iowa Press (Republished in 2013)

48 Ralph Nader (1965), *Unsafe at Any Speed*

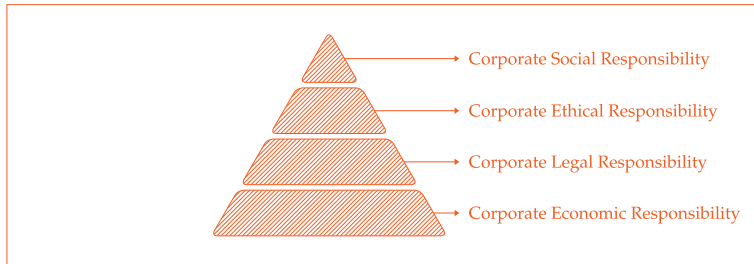
49 The Club of Rome (1972), *The Limits to Growth*

50 H. L. Johnson (1971), *Business in Contemporary Society: Framework and Issues*, Wadsworth

51 G. A. Steiner (1971), *Business and Society*, Random House

52 Archie Carroll (1991), *The Pyramid of Corporate Social Responsibility: Toward the Moral Management of Organizational Stakeholders*, *Business Horizon*, July-August, 1991

The CSR Pyramid



Source: Archie Carroll (1991), "The Pyramid of Corporate Social Responsibility"

well as actively fulfill their fourth responsibility for society. This is called the 'CSR Pyramid.'

Since 1990, CSR has begun to be considered something every company is expected to do and has spread to both world-class and medium-sized companies. In Korea, social responsibility activities started in 1994 with the launch of the Samsung Volunteer Club. As of 2017, the social responsibility activities of 229 major companies amounted to 0.14% of sales, 2.67 trillion won, the participation rate of executives and employees was 52.8%, and the average duration of 250 major social responsibility programs was 7.9 years. All this data show CSR activities are ongoing and widespread.⁵³

In 2010, the International Organization for Standardization (IOS) released the ISO 26000,⁵⁴ an international guidance for social responsibility, which boosted the spread of the recognition that CSR is a natural mission for businesses around

the globe. Based on seven principles such as accountability, transparency, ethical behavior, consideration of stakeholders' interests, compliance with laws, and respect for international code of conduct and human rights, ISO 26000 emphasizes human rights, labor practices, environment, fair enforcement practices, consumer issues, and community involvement and development as key tasks. This guidance is not a means of sanctioning companies, but provides recommendations for sustainable business activities. ISO 26000 aims to help companies improve their competitiveness, sharpen their capacity to manage employees or customers, raise employee morale, win trust of investors and financial institutions, and develop a better relationship with government and communities, by adhering to the guidelines.

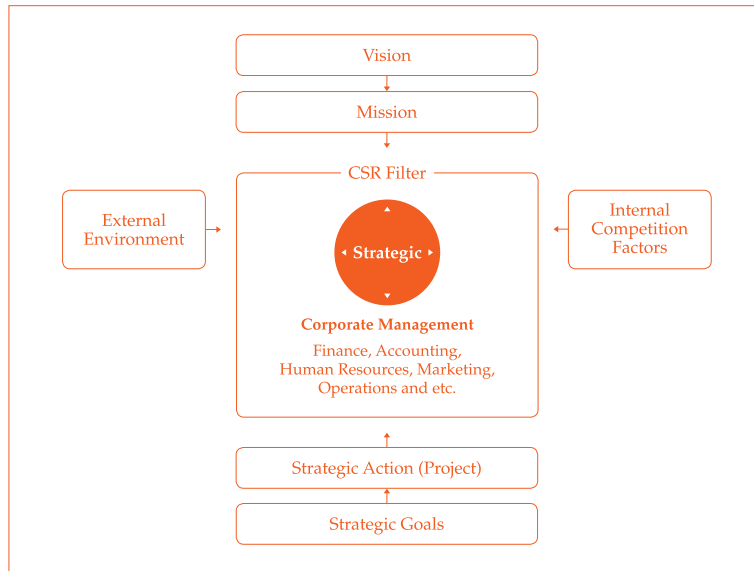
CSR is being practiced in the form of "sustainable management." The UN emphasizes the balance and convergence between 1) economic performance of a company, 2) social performance, and 3) environmental outcomes as three key principles of sustainability management,⁵⁵ which is also called the 'Triple Bottom Line of Sustainability (TBL).' Profit representing the economic performance, people representing

⁵³ Korea National Council on Social Welfare & Korea Chamber of Commerce and Industry (2018), *2018 Annual Report on Corporate Social Responsibility*

⁵⁴ International Organization for Standardization (2010), *ISO 26000: Social Responsibility*

⁵⁵ Wayne Viser (2012), *Corporate Sustainability & Responsibility*, Kaleidoscope Futures Ltd.

Flowchart of CSR Filter-based Corporate Strategy Development



Source: David Chandler (2017), *Strategic Corporate Social Responsibility*

social performance, and the earth representing the environment are collectively called ‘three pillars.’ TBL is currently being used as a measure of performance in quasi-public areas such as urban development, and some advanced countries such as United States and Australia are also pushing for the legislation on the use of TBL across all private companies.

Chandler emphasizes strategic CSR and explains why CSR is needed for the following four reasons. First, for ethical reason, in terms of Bentham’s utilitarianism that an action is ethical if it produces “maximum utility” of a society as a

whole and from the perspective of Kent’s idealism that the execution process should be ethical regardless of the consequences, actions of businesses should be ethical. Second, for moral reason, businesses are part of the community, and therefore, their activities should be consistent with social values and norms. Third, for rational reason, complying with laws and regulations is sensible for companies as activities in violation of laws and regulations face social sanctions. Fourth, for economic reason, companies can maximize profits by satisfying stakeholders through CSR activities.

Chandler also lists five factors that make a company’s CSR inevitable today, such as 1) Affluence - as income levels rise, societal expectations for firms grow, so firms must strengthen CSR activities to meet such expectations; 2) Sustainability - as interest in the environment increases with growing income levels, companies should keep pace; 3) Globalization - as corporate activities go global and therefore the scope of stakeholders expands, it is necessary to boost CSR activities in response; 4) The media - as the scope and influence of the media increase, whether CSR activities are successful or not greatly affects a company’s external image; 5) Brands: CSR activities increase the value of a company’s brand that is becoming important over time. In conclusion, the basic goal of ‘strategic CSR’ is that businesses should make profits and by extension create values in a sustainable way.

CSV: Pursuing Economic and Social Values Simultaneously

“The capitalistic system is under siege. In recent years business increasingly has been viewed a major cause of social, environmental, and economic problems. Companies are widely perceived to be prospering at the expense of the broader community. This diminished trust in business leads political leaders to set policies that undermine competitiveness and sap economic growth. Business caught in a vicious circle.”

— Porter & Kramer (2011), “*Creating the Shared Value*”, HBR

Anthony Giddens’s the ‘Third Way’⁵⁶ is an alternative suggested by the liberal camp, which stresses the role of government in the face of the welfare state in crisis and globalization. On the other hand, stakeholder theory and CSR are countermeasures proposed by the conservatives who emphasize the role of the market and businesses amid a negative view of corporate activities and the market economy spreading due to worsening environmental problems and deepening polarization.

There was a growing concern that CSR activities are more likely to be zero-sum by nature by using part of a company’s profits for social purposes to enhance its public image, making little responsibility to society. Porter & Kramer⁵⁷ proposed a new concept that corporate activities should be actively implemented in the area where the economic and social values of a company meet. This is called ‘Creating Shared Value (CSV)’. The essence of the CSV concept is that

a company should develop and execute a business that can enhance economic and social values at the same time.

CSV is a new way of practicing ‘strategic CSR’ and is an attempt to focus on raising social value along with the economic value of a company, as society’s negative perception of the company can be a new cost for the company. Porter & Kramer suggest three methods to take on CSV activities.

First is to develop new products and markets to meet social needs. For example, by developing foods that are not only delicious but also healthy, a company can enhance the social value of consumers’ health and the economic value of the company’s profits at the same time. In fact, many food companies have developed and marketed healthy food products, making high profits and contributing to the health of the public.

Second is to redefine productivity in terms of social value. By improving the distribution route of products, companies can increase the economic value of reducing transport costs and the social value of saving energy simultaneously. Many large retailers such as Walmart have done this and created enormous profits and contributed to energy savings.

Third is to support related projects and improve the sur-

56 Anthony Giddens (1998), *The Third Way: The Renewal of Social Democracy*, Polity Press

57 Michael Porter and Mark Kramer (2011), “*Creating Shared Value: How to Reinvent a Wave of Innovation and Growth*”, Harvard Business Review, January-February

CSR vs. CSV

CSR	CSV
Value: doing good	Value: economic and societal benefits relative to cost
Citizenship, philanthropy, sustainability	Joint company and community value creation
Discretionary or in response to external pressure	Integral to competing
Separate from profit maximization	Integral to profit maximization
Agenda is determined by external reporting and personal preferences	Agenda is company specific and internally generated
Impact limited by corporate footprint and CSR budget	Realigns the entire company budget

Source: Porter & Kramer (2011), "Creating the Shared Value"

rounding environment. Food companies can support farmers from whom they purchase raw materials and participate in the development of agricultural infrastructure in the region to increase their own profits and the economic value of their operations by purchasing raw materials stably and to enhance the social value of local economic development. In developing countries and in Africa that supply raw materials to multinational food companies like Nestle, companies are successfully making profits as well as regional development through these activities.

These cases show that CSV is a management method that brings big internal and external results with relatively small investment by seeing business management from the perspective of creating shared value. While the traditional CSR

was a zero-sum method of using corporate profits for social purposes, CSV is more efficient and sustainable because it is characterized by a plus-sum method increasing economic and social values altogether. Also, since CSR is done for philanthropy independently of a company's original goal of maximizing profits, but as it must keep the company competitive, CSV can be promoted at the company level and at whatever scale.

CSV is a momentum for redefining the roles of businesses, governments, and NGOs. Traditionally, governments have often regulated corporate activities to solve social problems such as environmental issues, but if companies take on solving these social problems through CSV activities, they can be partnered with the government without conflict. Also, NGOs have traditionally been watchdogs of corporate activities in areas such as the environment, but if companies conduct CSV activities in these areas, they can forge new friendly partnerships with NGOs too.

The view that companies should be active in solving social problems for sustainable management is now spreading all over the world. A McKinsey report⁵⁸ said, "With the demand for key resources exceeding supply and many countries fiercely competing for jobs, in order to set the

⁵⁸ McKinsey & Company (2010), *Shaping the Future: Solving Social Problem through Business Strategy*, Committee Encouraging Corporate Philanthropy

global economy on a sustainable course, companies should endeavor to increase their competitiveness and show effort and leadership to innovate their management strategies and solve social problems.” This is also confirmed in a survey of CEOs. Respondents amounting to 77% said they would reflect social problem solving in their strategies and organizational structure, and 60% of respondents believe that businesses can solve social problems more efficiently.

4. The Era of Sustainable Value Creation Is Coming

Paradigm Shift in Development and the Rio Summit

“Humanity stands at a defining moment in history. We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being. However, integration of environment and development concerns and greater attention to them will lead to the fulfillment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future. No nation can achieve this on its own, but together we can – in a global partnership for sustainable development.”

— UN Conference on Environment & Development (1992), *Agenda 21*

If CSR is a concept of sustainability for business management, ‘sustainable development’ is the one that emphasizes the importance of sustainability in managing a country. This

concept began to emerge in the late 1980s in activities led by the UN. The term “sustainable development” was first mentioned in a 1987 report of the UN Commission on Environment & Development, led by Norwegian Prime Minister Brundtland. Based on this report, the UN Conference on Environment & Development, held in Rio de Janeiro, Brazil in 1992, adopted ‘Agenda 21’⁵⁹ as ‘sustainable development’, meaning that in order to drive economic development in a sustainable way, environment development needs to be addressed together from the early stage.

Sustainable development has since become the fundamental philosophy of all UN-sponsored international events on development. At the Rio Summit attended by 178 countries, most economists held the view that dealing with environmental issues from the beginning of development would slow down economic development, and Korea was no exception. However, the 1992 Rio conference has great historical implication in that it has changed the false perception of the environment and made sustainable development become a new paradigm of development strategy in the international community.

Since then, the concept of sustainable development has evolved into a holistic approach that encompasses all three

⁵⁹ UN Conference on Environment & Development (1992), *Agenda 21*

dimensions of economic development, social inclusion, and environmental sustainability.⁶⁰ This implies that the paradigm of the international community has shifted from the East Asian-type disproportionate development strategy that puts economic growth first to the Nordic-inclusive development strategy that integrates economic development, social development, and environmental preservation.

The success of the Rio conference has led the UN to pay more attention to the issue of sustainable development. Upon organizing and operating the United Nations Secretary General's-High Level Advisory Board on Sustainable Development, the UN held the World Summit for Social Development in Copenhagen, Denmark, in 1995. During this summit, the heads of state of 117 countries including Korea announced the Copenhagen Declaration, which aims to eradicate poverty, achieve full employment, and build social integration as the primary goals of development. This made environmental issues and other various problems related to social development as a means of sustainable development listed on the core agenda of the international community.

“We gather here to commit ourselves, our Governments and our nations to enhancing social development throughout the world so that all men and women, especially those living in poverty, may exercise the rights, utilize the resources and share the responsibilities that enable them to lead satisfying lives and to contribute the well-being of their families, their communities

and humankind. To support and promote these efforts must be the overriding goals of the international community, especially with respect of people suffering from poverty, unemployment and social exclusion.”

— UN World Summit for Social Development (1995), *Copenhagen Declaration on Social Development*

To further refine the agenda on sustainable development, the United Nations held the Millennium Summit in New York in September 2000. This summit was attended by heads of state of 191 countries and 22 international organizations and adopted the eight Millennium Development Goals (MDGs) to achieve by 2016⁶¹: 1) Eradicate extreme poverty and hunger, 2) Provide the universal primary education, 3) Promote gender equality and empower women, 4) Reduce child mortality, 5) Improve maternal health, 6) Combat HIV/AIDS and malaria, and other diseases, 7) Ensure environmental sustainability, and 8) Develop a global partnership for development.

MDGs are very significant in that they draw worldwide attention to eight areas of poverty and set specific targets by sector, providing a useful basis for developing countries to come up with a development plan and for international development partners to set up a business plan and put it into action. As a result, there have been significant achievements

⁶⁰ SDSN: Sustainable Development Solution Network (2015), *Getting Started with the Sustainable Development Goals: A Guide for Stakeholders*

⁶¹ UN General Assembly (2000), *The Millennium Development Goals Report*

in poverty and health. The UN announced the key achievements of MDGs by the target year 2016⁶²: First, more than 1 billion people have been freed from extreme poverty since 1990. Second, infant mortality has decreased by half since 1990. Third, the number of students dropping out of school since 1990 has halved. Fourth, the HIV virus that can lead to acquired immunodeficiency syndrome (AIDS) and infection rates of AIDS have slumped by 40% or so since 2000.

Nevertheless, the MDGs have been criticized for being insufficient in creating enabling conditions for self-development because the goals touched only the basic tasks for human development, such as eradication of extreme poverty and hunger, provision of primary education, and better health and hygiene.⁶³ Some have pointed out that the MDGs are not reflecting effectively local conditions of each country by adopting a top-down approach in which the United Nations set global targets first and then have each country submit targets on a national basis. Others criticize that the MDGs set the targets only, but with no policy means to make them come true and lack in specific action plans including funding source.

SDGs: Specific Sustainable Development Goals

“The 17 Sustainable Development Goals (SDGs) form a cohesive and integrated package of global aspirations the world commits to achieving by 2030. Building on the accomplishments of

their predecessors the MDGs, the SDGs address the most pressing global challenges of our time, calling upon collaborative partnerships across and between countries to balance the three dimensions of sustainable development – economic growth, environmental sustainability, and social inclusion.”

— SDSN (2015), *Getting Started with the Sustainable Development Goals*

Taking into account the achievements and criticisms of the MDGs, the UN adopted the 169 ‘Sustainable Development Goals (SDGs)’ in 17 sectors to achieve by 2030 at the UN General Assembly in 2015⁶⁴: 1) No poverty, 2) Zero hunger, 3) Good health & wellbeing, 4) Quality education, 5) Gender equality, 6) Clean water & sanitation, 7) Affordable & clean energy, 8) Decent work & economic growth, 9) Industry, innovation & infrastructure, 10) Reduced inequality, 11) Sustainable cities & communities, 12) Responsible consumption & production, 13) Climate action, 14) Life below water, 15) Life on land, 16) Peace, justice & strong institutions, and 17) Partnership for the goals.

The SDGs consisting of 169 targets in 17 sectors are highly interrelated, so outcomes in one sector have a positive ripple effect in other related sectors. For example, global environmental performance has a positive effect on marine and life

⁶² UN (2018), *Sustainable Development Goals: Transforming from the MDGs*

⁶³ Won-hyeok Lim (2012), *Lessons from the Millennium Development Goals and Implications for the Development Agenda for 2016 and Beyond*, KDI Focus

⁶⁴ UN General Assembly (2015), *Transforming Our World: The 2030 Agenda for Sustainable Development*

sectors, and health and gender discrimination performance have a positive impact on poverty alleviation and improved distribution. Each year, the UN General Assembly holds a summit on sustainable development and systematically monitors its progress during the year and releases the results in an annual Sustainable Development Goals report.⁶⁵ Further, the SDG Index⁶⁶ has been developed to quantify performance by sector and by country to provide an in-depth analysis of implementation. This is an improvement by the UN in response to the criticism that the monitoring of the implementation of the MDGs was not systematic.

The SDGs are in line with the '5P Strategy' set forth by the UN: 1) People: to eradicate poverty and hunger among low-income group as the core of the 5P Strategy, 2) Planet: to protect the global environment through sustainable production and consumption, sustainable management of natural resources, and addressing climate change, 3) Prosperity: to secure economic stability and prosperity through economic and technological development, 4) Peace: to strive to create a peaceful, just and inclusive society, and 5) Partnership: to build a close partnership between countries to achieve the Sustainable Development Goals.

The SDGs are also expected to create new opportunities in five areas: 1) Inclusive growth: all stakeholders in society participate and share the benefit; 2) Universal growth:

the MDGs primarily target at developing countries, but the SDGs are strategic goals for all countries, including developed countries;⁶⁷ 3) Integrated development: the SDGs are an integrated approach that covers all areas of 5Ps; 4) Locally-focused development: the MDGs are top-down, while SDGs take a bottom-up approach, stressing the role of local communities and local governments; 5) Technology-driven development: given the recent fast technological developments as in ICT, the SDGs emphasize data collection and scientific analysis and the widespread use of technology in areas such as health and the environment.

The UN has launched the Sustainable Development Solution Network (SDSN) to enhance participation of experts in the progress of the SDGs and keep outcome analysis more scientific and objective. The SDSN has developed the SDG Index to measure the SDGs performance directly and the Happiness Index to measure the SDGs performance indirectly. The results are published annually in a booklet. The UN strongly encourages and supports the formation of national SDSNs composed of relevant experts by each country. Currently, economist Jeffrey Sachs is in charge of the SDSN

⁶⁵ UN (2018), *The Sustainable Development Goals Report*

⁶⁶ SDSN (2018), *SDG Index and Dashboard Report 2018: Global Responsibilities, Implementing the Goals*

⁶⁷ For example, *The 2018 SDG Index Report* focuses on examining the SDG situation of the G-20 countries, mostly developed countries, and identifying challenges for the future.

research activities. Korea's SDSN, made up of experts from all walks of life, is also active. In addition, the UN has established the Sustainable Development Action Network (SDAN) to encourage the participation of NGOs in various SDGs activities. Efforts are being made to facilitate interconnection and networking through online platforms for them.

Korea's Efforts for Sustainable Development

"Now the government's job is to create an 'inclusive growth, an inclusive country'. This is a concern for the Republic of Korea, and by extension, a shared challenge and concern for the international community and all countries in the world. Therefore, if we do it well and make it successful, it could be an example for the world."

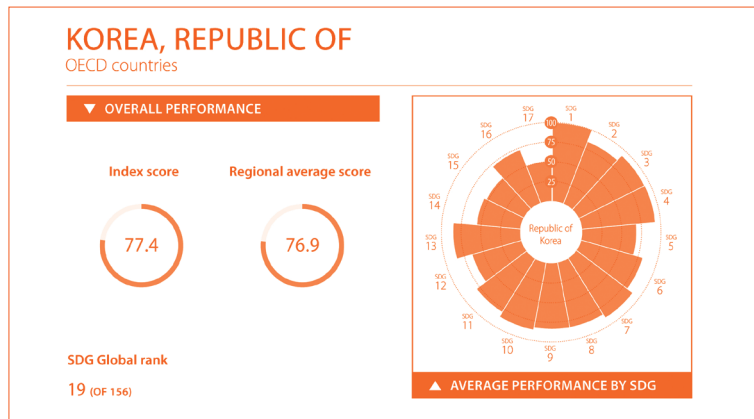
— President Jae-in Moon, *Remarks at the State Council on National Affairs* (November 21, 2018)

Since the Rio summit in 1992, Korea has actively participated in international conferences on sustainable development, and has tried to create and execute a blueprint of our own sustainable development strategy. In 2000, the Sustainable Development Commission was launched under the President and the National Sustainable Development Vision was declared in 2005. Based on this, the First Sustainable Development Strategy and Action Plan (2001-2010) was set up in early 2006, with the 77 Sustainable Development Goals chosen. In 2007, the Framework Act on Sustainable Development was enacted.

However, as the Framework Act on Sustainable Development was revised to the Sustainable Development Act in 2010, and the Presidential Committee was transferred to the Ministry of Environment, the government's interest and priority on sustainable development became lower to some degree. In the meantime, the Second Basic Plan for Sustainable Development (2011-2015) was formulated in 2011, and the UN Office for Sustainable Development opened in Songdo, Incheon. In 2014, the National Sustainable Development Report was published, and in 2015, the Third Basic Plan for Sustainable Development (2016-2020) was set up, which consists of four objectives, 14 sector-specific strategies and 50 action plans in the areas of environment, society, economy and international affairs. The UN strongly encourages participation of local governments, recognizing that approximately 65% of the SDGs can be achieved through the participation of local governments and stakeholders. In Korea, as of 2018, 13 state units of local government including Seoul Metropolitan Government and 40 district units of local government such as Bupyeong are participating in sustainable development projects.

The OECD evaluated Korea's SDGs based on the UN 5P Strategy and found that Korea falls short of the OECD average in many sectors, racing ahead in economic growth, clean water, and sanitation, but falling behind in social imbalance, climate change, and ecosystem. According to the SDG Index

Korea's SDG Index (2018)



Source: SDSN (2018), *SDG Index and Dashboard Report 2018*

prepared by the SDSN, as of 2018, Korea ranked 19th out of 156 countries, among the lowest of OECD countries. Korea turned out to be better off in the areas such as poverty, health, education, and energy and to perform poorly in international cooperation, marine and global ecosystems.

5. A Value-Creating Ecosystem Is in the Making

Performance Matters in Social Contribution Activities

“The product of the Non-Profit Organizations (NPOs) is often a changed human being. Therefore, CEOs of nonprofits should not be complacent that they do well but should work hard to do it very well.”

— Peter Drucker (1990), *Managing the Non-profit Organization*

Amid the growing importance of value creation in social

responsibility, managing non-profit organizations (NPOs) dedicated to social value creation is drawing attention. Peter Drucker,⁶⁸ a guru of business management, stresses that non-profits should not be content with doing good job, but do it fairly well as they have to carry out higher social tasks than for-profit companies. This is because NPOs must do a very difficult job, first converting simple donors into social contributors, giving the community a common sense of purpose, and inspiring volunteers for free to have a sense of mission. This suggests that CEO has a very important part to play for NPOs to carry out these tasks successfully. Drucker points out that rather than charisma, a sense of mission is more important for CEO of nonprofits.

After examining the characteristics of successful companies, Jim Collins⁶⁹ has found CEO's an iron hand in the velvet glove leadership style that combines humility and fierce will to be the most important success factor. He calls it 'Level 5 Leadership,' pointing out that the majority of the companies surveyed that have become a great company going beyond a simply good company are run by CEOs with this kind of leadership. Collins,⁷⁰ like Drucker, emphasizes that

68 Peter Drucker (1990), *Managing the Non-Profit Organization: Principles and Practices*, HarperCollins

69 Jim Collins (2001), *Good to Great: Why Some Companies Make the Leap...And Others Don't*, HarperBusiness

70 Jim Collins (2011), *Good to Great and the Social Sector: Why Business Thinking Is Not the Answers*, Harper

as CEO's leadership is more important for a nonprofit than a for-profit company, successful 'Level 5' CEO is required to run a nonprofit successfully.

"In the social sectors, the Level 5's compelling combination of personal humility and professional will is a key factor in creating legitimacy and influence."

— Jim Collins (2011), *Good to Great and the Social Sectors*

Collins also argues that to create a non-profit organization 'great', it needs 1) Level 5 CEO, who is humble and strong, and employees with a sense of mission and competence, 2) Strong and positive way of thinking even in difficult situations and a decision-making process that makes a good decision in consistent principles, 3) Workplace atmosphere where everyone fulfils their duties and unabated commitment that lasts until goals are achieved, and 4) System that maintains core value and promotes new experiments.

The most difficult aspect of nonprofit organization management is the fact that the economic performance of a for-profit company can be clearly measured in the form of a financial return, but the social performance of a nonprofit organization is very difficult to measure. Even if social performance can be measured, it is often difficult to identify the causal relationship between business and outcome. For example, in the case of a suicide prevention projects, suicide rates can be measured directly, but it is difficult to identify

the correlation between such projects and suicide rates.

Nevertheless, nonprofit organizations around the world are seeking ways to measure reasonable social outcome. For example, some of the world's leading charities, including the Rockefeller Foundation and the Gates Foundation, are constantly trying to measure the social outcomes of their projects. In 2012, the Community Chest of Korea developed evaluation indicators for social responsibility projects and released the results. During a 2008 meeting of charities and investors held in Bellagio, Italy, attendees agreed that investments should be made intensively in projects generating great social outcome with a focus on standardizing criteria, developing an evaluation system, and coming up with tools to manage outcome. In addition, the Global Impact Investment Network (GIIN) funded by the Rockefeller Foundation continues to develop and update programs to compare and analyze the social outcome of diverse projects. As social outcome analysis emerges as a new growth area, many professional institutions are interested in this area, making the prospects for developing new techniques bright.

Since measuring social outcomes is not easy, compensation for social work is often based on output or input rather than outcome. For example, government subsidies for social welfare facilities in Korea are provided to the residential facilities based on the number of people living in the facilities,

which are input rather than outcome, and to service facilities according to the size of the facilities. This input-based support has a weak incentive for service improvement, which causes service providers not to make efforts to improve the quality of their service. So advanced welfare states such as United States, United Kingdom, and Sweden have been using a service purchase contract system since its introduction over 20 years ago.

Social Innovation and Social Finance

“The recent rise of social enterprises and social entrepreneurs has been the momentum for the social welfare sector to find new opportunities with entrepreneurship and management techniques. Also, the development of the social finance market serves as a new catalyst to drive social innovation by connecting social entrepreneurs and social investors or donors through finance.”

— Sang-mok Suh (2013), *Welfareconomics: The Road to a Sustainable Capitalism and Welfare State*, Book Korea

Finance has contributed greatly to economic development by connecting suppliers who have money to invest with consumers who are looking for investors. Also, in social development, social finance serves as a facilitator in solving social issues. In the social finance market, funders are philanthropists, taxpayers, foundations, ethical investors, charitable venture funds, and commercial investors, while consumers of money are charities, village companies, coop-

eratives, and social enterprises. Besides, intermediaries that connect funders and consumers of money are credit unions, microfinance institutions, investment banks, private brokers and government brokers.

The United Kingdom and the United States are the most advanced countries in social finance, both of which have well-developed financial sectors. In United Kingdom, Blair’s government put in place the Social Investment Task Force (SITF) for ten years from 2000, creating a significant breakthrough for the growth of the social finance market. In 2001, tax benefits were given to local investments, along with the establishment of local development venture funds, UnLtd that subsidized business ventures, and AF Venturesome that provided the so-called ‘patient loans’ lending money to charities and social enterprises on favorable terms than the market, and others were established. In 2002, the government launched Charity Bank, which provided low-cost loans and advice to third sector agencies, and the Adventure Capital Fund for village companies. In 2003, the Phoenix Fund was created to support regional Community Development Finance Institutions (CDFIs) led by the Department of Commerce and Industry.

In 2007, the Department of Health launched the Social Enterprise Fund for social enterprises, and the Social Finance was established to issue the Social Impact bonds (SIBs). In

2008, the Tridos Social Enterprise Fund was established to provide venture capital to social enterprises, followed by the creation of the government-led Community builders Fund in 2009 to develop underdeveloped areas. Later in 2010, United Kingdom's social finance market was nearing completion with the launch of Big Society Capital, a wholesale financial institution to provide funds to social finance institutions as a joint venture between the government and private banks. These efforts have made the UK now the world's leader in social finance.

With the growing importance of social outcomes, 'impact investing' is developing rapidly in recent years. Impact investing is an investment in companies, organizations and funds aiming at solving social issues along with financial returns. The term is known as invented by the Rockefeller Foundation in 2007. The global financial crisis in 2008 caused financial experts to realize that "investment seeking profitability only is not sustainable" and turn to 'social impact.' According to the 2017 GIIN annual report, the impact investing assets in the global market amount to \$114 billion, and the investment amounted to \$25.9 billion in 2017 alone. Impact investing is now becoming a new trend in the global social finance market.

Impact investing in Korea is still in its infancy, but signs of progress have appeared lately. The Impact Finance Promo-

tion Committee was launched in May 2017, with a plan to create an impact fund worth 270 billion won, consisting of 70 billion won of contributions and donations by financial services companies and 200 billion won of investments made by general investors. The government also announced plans to revitalize impact finance in February 2017 and finalized a plan to create a Korean Social Benefit Fund worth 300 billion won over the next five years. The Seoul City government enacted a related ordinance in 2012 and is currently operating a 60 billion won social investment fund. In addition, Korea Venture Investment Corporation under the Ministry of SMEs and Startups plans to create and manage an impact investment fund worth 100 billion won.

'Collective Impact' Generates a New Synergy

"Large-scale social change requires broad cross-sector coordination, yet the social sector remains focused on the isolated intervention of individual organizations."

— John Kania & Mark Kramer (2011), *Collective Impact*, SSIR

The concept of "collective impact" was coined by Kania & Kramer.⁷¹ The core of 'collective impact' lies in that the cooperation and joint action of experts and organizations from various fields to solve specific social issues can lead to

⁷¹ John Kania & Mark Kramer (2011), *Collective Impact*, Stanford Social Innovation Review, Winter 2011

Phases of Collective Impact

Components for Success	Phase 1 Initiate Action	Phase 2 Organize for Impact	Phase 3 Sustain Action and Impact
Governance & Infrastructure	Identify champions and form cross-sector group	Create infrastructure (backbone and processes)	Facilitate and refine
Strategic Planning	Map the landscape and use data to make case	Create common agenda (goals and strategy)	Support implementation (alignment to goals and strategies)
Community Involvement	Facilitate community outreach	Engage community and build public will	Continue engagement and conduct advocacy
Evaluation and Improvement	Analyze baseline data to identify key issues and gaps	Establish shared metrics (indicators, measurement, and approach)	Collect, track, and report progress (process to learn and improve)

Source: Hanleybrown, Kania & Kramer (2012)

greater outcome than expected. By contrast, ‘isolated impact’ meaning different organizations seek their own solutions fails to produce a greater outcome than ‘collective impact’ but causes unnecessary competition among the organizations. However, many cases have shown that synergies are created when various organizations work together to solve social issues that can never be addressed by a single organization alone.⁷²

Cooperation, a prerequisite for ‘collective impact’, can take many forms such as 1) Funder collaboratives: funders who support projects of the same purpose collaborate to collect funds, 2) Public-private partnerships: in the process of providing services for the same purpose, the public sector and private organizations work together to reinforce each

other, 3) Multi-stakeholders initiatives: different types of stakeholders voluntarily cooperate to achieve a shared purpose, 4) Social sector networks: individuals or groups working in the same field build partnerships based on close ties, and 5) Collective impact initiatives: various organizations with common goals to address specific social issues promise to collaborate with each other strategically.

Kania & Kramer argues that organizations working together do not guarantee success, but following success factors are required: 1) Common agenda: the parties in cooperation must share a common vision to achieve a collective impact, 2) Shared measurement systems: cooperation can only be effective if there is an agreement between the participants on the criteria and methods of measuring the outcome, 3) Mutually reinforcing activities: ‘collective impact’ can be effective when activities between the participants are complementary, 4) Continuous communication: communication needs to continue efficiently based on mutual trust between the participants, and 5) Centralized support infrastructure: to maximize synergies of collective impact, it is necessary to establish and operate an organization that coordinates the entire project.

‘Collective impact’ is complete in three stages - business

⁷² F. Hanleybrown, J. Kania & M. Kramer(2012), *Channeling Change: Making Collective Impact Work*, The Stanford Social Innovation Review, January

Isolated Impact vs. Collective Impact

Isolated Impact	Collective impact
Funders select individual grantees that offer the most promising solutions.	Funders and implementers understand that social problems, and their solutions, arise from interaction of many organizations within a large system.
Nonprofits work separately and compete to produce the greatest independent impact.	Progress depends on working toward the same goal and measuring the same things.
Evaluation attempts to isolate a particular organization's impact.	Large scale impact depends on increasing cross-sector alignment and learning among many organizations.
Large scale change is assumed to depend on scaling a single organization.	Corporate and government sectors are essential partners.
Corporate and government are often disconnected from the efforts of foundations and nonprofits.	Organizations actively coordinate their action and share lessons learned.

Source: Hanleybrown, Kania & Kramer (2012)

launch, project execution to achieve outcome, and creation and evaluation of outcomes as shown in detail below.

In conclusion, 'isolated impact' and 'collective impact' show a big difference both in the implementation process and the result. First, the former relies on only one institution as an actor, but the latter selects multiple project performers and utilizes their collective impact. Second, in 'isolated impact' many entities compete with each other for the same purpose, while 'collective impact' they cooperate with each other by sharing roles using their strengths. Third, the former evaluates every institution independently, but the latter emphasizes the overall outcome of all institutions in cooperation. Fourth, the former should increase the role of the

relevant institutions to increase the outcome, but the latter emphasizes the importance of cooperation between the participating agencies and the collaborations between businesses and the government. Fifth, in case of the former, activities of businesses and the government have no connection with those of nonprofits, but in case of the latter, nonprofits, businesses and the government share experiences and lessons by working together with each other. In short, it is no coincidence that 'collective impact' has far more social outcomes than 'isolated impact'.

