

Part I: Special Theme: Why is ICT Essential for Japan's Revival?

In the midst of the global economic downturn in the aftermath of the financial crisis in the United States, the Japanese economy is facing a serious stagnation of economic activities and has seen lower-than-expected negative growth. Japan must take all possible measures in order to swiftly overcome this economic hardship and steer the economy back on the track to recovery. The 2009 White Paper on Information and Communications in Japan presents a detailed discussion of how information and com-



Section 1 Importance of ICT for Economic Regeneration

First, correlations between indices related to ICT and those related to economic growth are statistically examined mainly using international data.

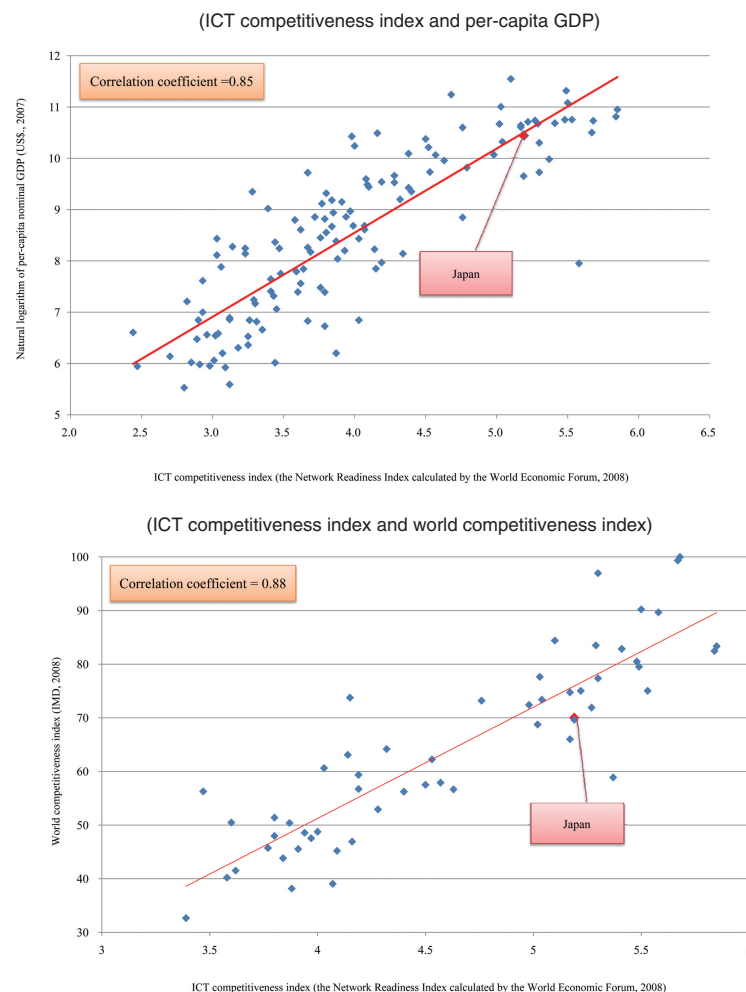
1. Correlation between ICT and economic growth

Figure 1-1 shows a correlation between various indices related to economic growth and, the ICT competitiveness index (Network Readiness Index (NRI)) which has been annually released since 2000 by the World Economic Forum (WEF) and used throughout the world as a rough surrogate variable to show the performance of the information and communications sector in different countries.

The upper graph in figure 1-1 shows the relation-

ship between ICT competitiveness index and per-capita GDP and the lower graph in figure 1-1 shows the relationship between ICT competitiveness index and world competitiveness index (regarded as an index that comprehensively assesses factors determining the mid- and long-term growth power of a country) which has been annually published by the International Institute for Management Development (IMD). Both figures clearly indicate that there is a correlation, and there is no doubt that competitiveness in the information and communications sector is closely related to a country's economic growth.

Figure 1-1 ICT competitiveness index and economic growth



¹ Abbreviation of Information and Communications Technology

munications measures can help to bring about the revival of Japan, designating the special theme of part I as “Why is ICT Essential for Japan’s Revival?”

Chapter 1 examines the theoretical and empirical grounds for “Channels Linking ICT with Growth.” Then, chapter 2 gives a quantitative assessment of various aspects of the “Changing Global Economy and Japan’s ICT.” Lastly, chapter 3 presents specific measures for the “Three Challenges Facing Japan’s Revival,” together with a set of evidential data.

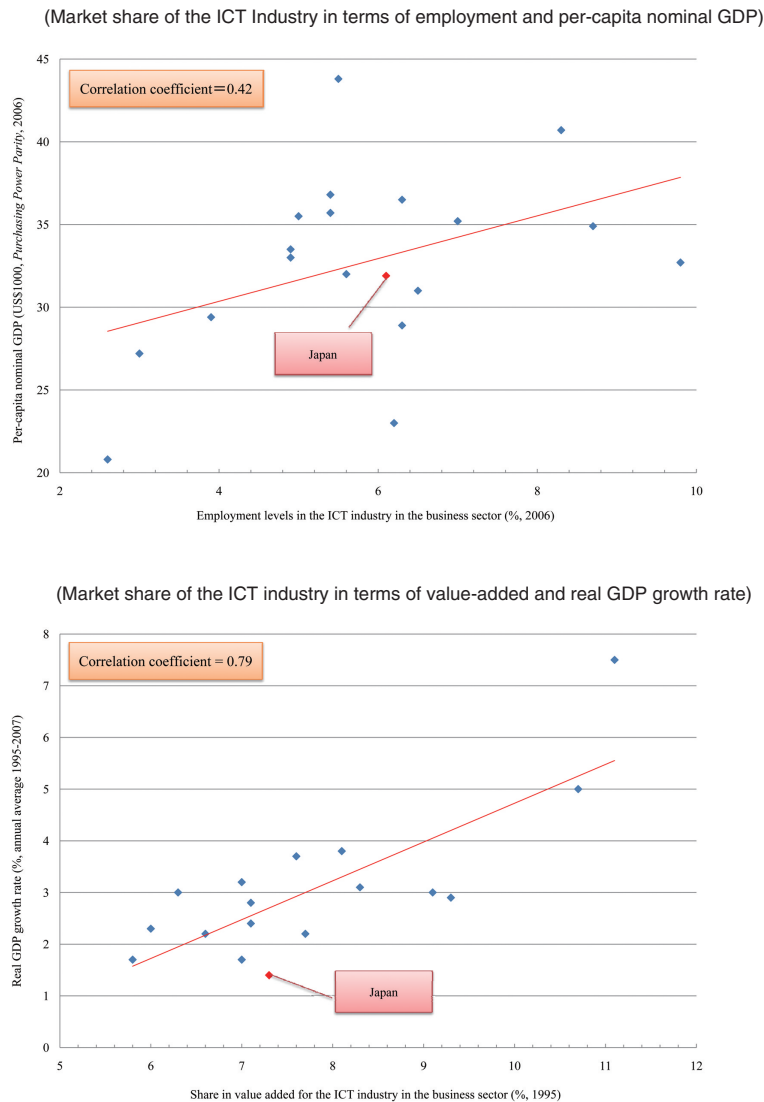
2. ICT as pillar of industry

The upper graph in figure 1-2 shows the relationship between GDP-related indices and ICT industry market share. The graph on the left shows per-capita nominal GDP (dollar-based purchasing power parities) in 2006 in OECD countries and ICT industry market share (employment base) and it suggests a positive--though weak--correlation. The lower graph in figure 1-2 shows ICT industry market share in 1995 for countries with a high GDP and mean annual growth rate of

real GDP during 1995 and 2007, and also gives a positive correlation.

In other words, in countries with high per-capita GDP, the ICT industry tends to have a large market share and the ICT sector represents a large proportion of the industrial structure, which tends to serve as an accelerator for economic growth. It is suggested that as their knowledge-based economies progress, developed countries identify the ICT industry as one of the pillars of strategic industry.

Figure 1-2 Correlation between per-capita GDP and ICT industry market share



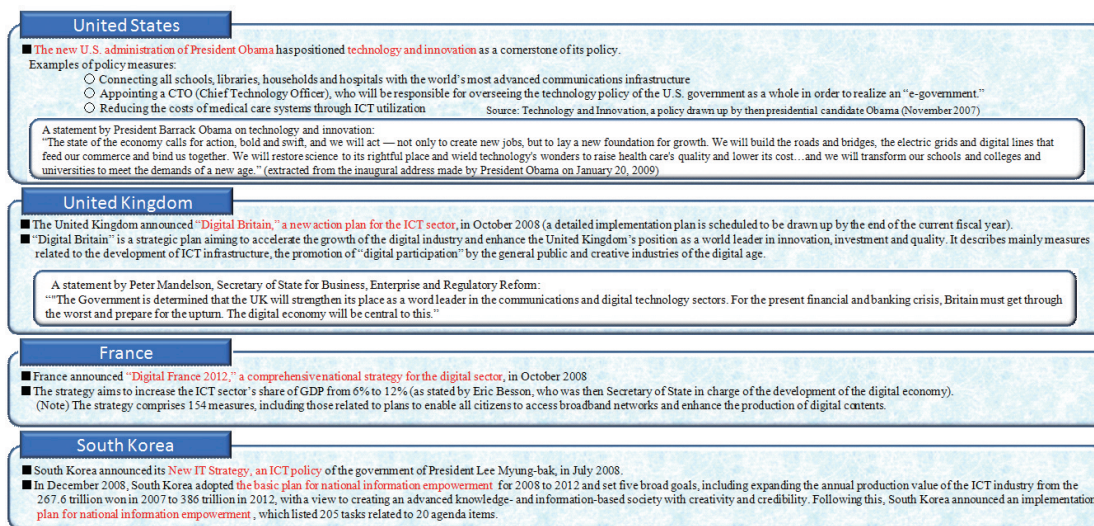
Compiled from Country Statistical Profiles 2009, OECD (2009)

3. New national ICT strategies of other countries

Developed countries have exerted all their efforts to take economic revival measures in the midst of the global economic crisis. It is becoming apparent that major countries are trying to formulate national ICT

strategies in conjunction with strengthening economic revival measures. Major economies have realized the importance of ICT for economic growth while implementing economic packages of an unprecedented size and established a concept whereby they place ICT as a new sector that contributes to shaping the future nation (See figure 1-3).

Figure 1-3 National digital strategies adopted by major economies



Compiled from a report from the Panel on ICT Vision (reference document 2 of the second meeting) (2009) of the Ministry of Internal Affairs and Communications.

http://www.soumu.go.jp/main_sosiki/joho_tsusin/policyreports/chousa/ict_vision/pdf/090127_2_sa2.pdf