This research is conducted on the base of the highly disaggregated firm-level balance sheet, income statement, cash flow and management indices data of about 4300 Japanese both listed and unlisted companies for the period of 2006-2013. All data was collected by the author from the first hand financial statements of Japanese companies.

After giving detailed introduction in Chapter I, he analyzed how 2008-2009 Financial Crisis (hereinafter “FC”) emerged in United States has been transmitted to the Japanese manufacturing firms in Chapter II. On the base of this research the author wrote his first paper – “The Impact of 2008-2009 Financial Crises on Operational Performance of Japanese Firms through Different Channels\(^1\)”. This paper empirically investigates how the operating performance of Japanese firms changed after the 2008-2009 financial crisis. By using the data on liquidity and credit of 1,363 Japanese manufacturing firms, this paper employs the empirical methodology developed by Rajan and Zingales (1998) to distinguish the crisis effect on Japanese globally operating firms from that on other Japanese firms that are domestic market oriented. It is found

\(^{1}\) Earlier version of this paper was presented at the 14\(^{th}\) East Asian Economic Association International Conference in Bangkok, Thailand, 1-2November, 2014
http://www.eaeaweb.com/3eaea_conventions.html (Session CS2F2: CS2F2P206OlimovAshrafbekX)
that external trade and liquidity channels served as a gateway to the crisis impact on Japanese firms. The financial crisis tends to deteriorate the overall sales of globally operating firms more severely than other firms. Meanwhile, globally operating firms are relatively immune to the crisis effect if the ratio of overseas sales to total sales is smaller. Firms with bigger non-cash current ratio were hit more by the crisis than those with smaller ratio in generating profit through their equity, likely because the former employed more risk because of pre-crisis distributed liquid assets. Moreover, other findings suggest that shareholders preferred to sell their non-current assets during the crisis period to increase their working capital rather than borrowing from banks. Interestingly, the credit channel did not play as significant role as other channels in crisis transmission in Japan, although the United States was first hit by the banking crisis.

In Chapter III, it is conducted similar analysis to examine the effects of 2011 Great East Japan Earthquake (hereinafter, “GEJE”) through liquidity and credit crunches to the operational performances of both multinational and domestic Japanese manufacturing firms. Natural disaster differs in many ways from financial crises such as debt-crisis, currency crisis and banking crisis. On the basis of findings in this research, the author wrote his second paper – “Responses of Japanese multinational and domestic firms to the 2011 Great East Japan Earthquake - different shock analysis”\(^2\). This paper empirically investigates how the operating performance of Japanese firms changed after the 2011 Great East Japan Earthquake. By using the data on liquidity and credit of 1,606 Japanese manufacturing firms, this paper employs the empirical methodology

developed by Rajan and Zingales (1998) to distinguish the natural disaster effect on Japanese globally operating firms from that on other Japanese firms that are domestic market oriented. We also widened our analysis creating two sub-samples according to the location of the firms and their branches that are closer to ground zero. First subsample captures 538 (of which 298 multinationals) manufacturing firms which have either headquarter or at least one branch in the Tohoku\textsuperscript{3} and selected Kanto prefectures\textsuperscript{4}, while the second sub-sample contains of firms only headquarter of which are located in those prefectures. It is found that multinational companies were affected significantly worse than domestic counterparts in all operational performances. Interestingly, another finding showed that firms which gave more trade credits to clients and kept additional inventories generated significantly better profit during supply shock despite meeting larger sales decline. Meanwhile, globally operating firms are relatively immune to natural disaster effect if the ratio of overseas sales to total sales is smaller. Moreover, internal shock blew the hardest impact the firms with more interest bearing loans. Especially, manufacturing firms closer to ground zero with headquarters or branches in Tohoku and selected Kanto area were affected severely through credit channels, while their significant coefficient through credit channel was more or less tripled than those in whole sample.

Primarily, in chapters II and III, the author attempted to examine the disturbance channels to Japanese firms during financial crisis and Gear East Japan Earthquake by analyzing the changes in operating performance subsequent to particular shocks. The examined ex-post operating performance showed that the 2008-2009

\textsuperscript{3} All Tohoku prefectures are included: Akita, Aomori, Fukushima, Iwate, Miyagi and Yamagata.

\textsuperscript{4} Selected Kanto Prefectures are Chiba, Gunma, Ibaraki, Saitama and Tochigi.
financial crisis hit Japanese firms through trade and liquidity channels (Claessens et al. 2012, Hosono et al. 2012), while the Great East Japan Earthquake affected supply chain networks (MacKenzie et al. 2012). Therefore, findings of Chapter II and III also confirmed that liquidity channel which was directly linked to working capital management played substantial role to affect the operating performance of the Japanese companies which was why it was conducted further comprehensive analysis to the liquidity issues of Japanese firms in Chapter IV. By employing fixed effect LSDV model, it is examined the effects of components of working capital management like cash conversion cycle (CCC) on profitability of the firms during 2008-2013 years. Reason to select the sample period from 2008 to 2013 is to capture two consecutive shocks. Nevertheless, two subsamples were created to examine the relationship during two-shorter periods. To focus on how working capital management effected to the manufacturing firms’ profitability after GEJE only, he ran regressions for the period 2011 to 2013 with first subsample. Moreover, observing that 2008 FC deteriorated firms’ profitability much beyond the handling effective working capital policy, core financial crisis period - 2008\(^5\) was omitted from the main sample and it was tested through regressions for the period 2009 to 2013. On the basis of the finding in this research, the author wrote his third paper “Effects of Liquidity Management on Operating Performance of multinational and domestic firms: Evidence from Japan”\(^6\) which serves as a Chapter IV of the dissertation. Considering working capital management as a vital issue in explaining liquidity of firms, by employing a fixed effect LSDV model, the

\(^5\) 2008 sample data captures financial statements by March 31 of 2009 which is consistent with the core 2008-09 FC period.

author analyzed the effects of components of working capital management like cash conversion cycle (CCC) on profitability of firms. The results revealed a significant negative relationship between firms’ performance and cash conversion cycle. It revealed that excess inventory significantly bared extra costs for just-in-time accustomed Japanese manufacturing firms. Moreover, in addition to handling inventories skillfully, distributing trade credits proficiently among buyers (AR) had important effects to better profitability. Both components together resulted in days of cash conversion cycle (CCC) to take strongly negative relationship with profitability. Other findings explain that the 2008-09 financial crisis hit Japanese core manufacturing industries to a degree that profitability could not have been improved by managing payments to suppliers efficiently and by taking receivables as early as possible. However, it confirmed that dealing with inventories properly had significant effects even during the 2008-09 financial crisis. The fact that days of accounting payables (AP) did not show any significance demonstrates the cash abundancy of Japanese manufacturing firms.

In the last chapter, the author concluded his findings.