This paper traces the latest stage in the internationalisation of James N. Kirby Ltd (now Heatcraft Australia Pty. Ltd.), a medium-sized family owned Australian manufacturing firm established almost 80 years ago – namely, its acquisition by a US company as part of the latter’s internationalisation strategy. The paper considers the acquisition from the perspective of the internationalisation of both the firm acquired and the firm that undertook the acquisition. Network theory has not traditionally focused on international acquisitions, the form of internationalisation in which James N. Kirby has recently been involved. In addition, network theory does not specifically address acquisitions as part of the internationalisation strategy of acquiring firms. In both instances, the analysis in this paper is in terms of the networks in which each firm was embedded prior to the acquisition and how these networks resulted in the acquisition. The new networks that resulted from the acquisition is then discussed in terms of the internationalisation of the parties involved.

INTRODUCTION

In the latter part of 1999, James N. Kirby, a highly successful international Australian firm, was taken over by US interests, specifically by Lennox Global Ltd. (LGL), a subsidiary of a large U.S. company Lennox International. Acquisitions of this kind raise the issue of whether theories of internationalisation using the network approach addresses the full gamut of firms’ international activities. Also to be questioned is whether in internationalisation terms, an acquisition represents the end of the firm’s international involvement or the commencement of a new era in the firm’s internationalisation. Acquisition is being increasingly used as a vehicle for expansion or rationalisation of commercial activities. When it is driven by a desire to increase involvement in international operations, and, when the acquired firm continues trading under its original name, then acquisition should perhaps be regarded as a new era in firms’ internationalisation, rather than as the end of the road.

NETWORK APPROACHES TO INTERNATIONALISATION AND ACQUISITION

Acquisition from the perspective of the acquired.
There have been a number of approaches that consider internationalisation from a network perspective. The widely cited Johanson and Mattsson (1984) approach to the application of network theory to internationalisation (international extension, international penetration, international integration), does not go beyond the situation where the firm coordinates the positions it occupies in different national networks. This may be because they did not view the firm being taken over by other interests as, with acquisitions, the take over is more likely to be driven by an outside party rather than by the firm itself. In a subsequent paper, Johanson and Matsson (1988) distinguish between ‘macro positions’ and ‘micro positions’ in the network. The former relates to the role of the firm in relation to other firms in the network and the
latter to the relation of the firm to the network as a whole. This distinction was not discussed in relation to acquisitions.

Havilla (1996) researched the effects when parties in a long standing relationship stop dealing with each other. The focus in this paper was on dissolution rather than acquisition. Specifically it was argued that dissolution is due to the buyer undertaking activities previously performed by the supplier, government closing down the customer, changes in customer’s manufacturing process causing a switching of sources of supply, and customer switching to cheaper sources of supply, often because of grey market activities. Anderson et al (1994), in their research focus on the coordination of relationships as opposed to the internationalisation of the firm. This focus leads to the need to adopt a flexible approach to providing external value added activities needed for a competitive offering. This need may result in the formation of a ‘virtual corporation’ which is likely to be a transitory network of firms organised around a specific opportunity. As acquisitions are permanent, this approach is not totally relevant even though the acquisition may have been driven by the need to acquire needed resources.

At the last IMP Conference at Bath (September 2000) several papers were presented that addressed the issue of ending exchange relationships. Tahita and Kalila (2000), demonstrated that research into the ending of relationships increased during the late 1990’s, and categorised the concepts involved as dissolution, termination, exit, switching behaviour, divorce, deteriorating relationship, ending, fading relationship and failure. None of these, as discussed, specifically focused on acquisition and all, apart from switching behaviour, are terminal in nature, whereas acquisition implies continuity for the body corporate, albeit in a different guise.

There is often a presumption that with acquisition, the internationalisation of the acquired is over. This may not necessarily be the case. Possibly such take over activity could be classed as ‘de-internationalisation’. There has been some exploratory research into de-internationalisation (Welch and Benito 1996, Fletcher 2000). However, this has focused on conscious decisions by firms to consolidate their activities, be they at home or abroad so as to improve future potential for internationalisation or to return to core competencies and markets so as to strengthen their position for international undertakings at a future point in time. This is supported by Lamb and Liesch (1998) who conclude that an evolutionary model of internationalisation should encapsulate the full extent of the internationalisation process. It is also supported by Pauwels and Matthyssens (2000) who discuss international market withdrawal as a strategic instrument of a proactive global strategy which may increase the overall degree of internationalisation of the firm. These studies of de-internationalisation do not consider it in terms of the firm being acquired by other interests.

**Acquisition from the perspective of the acquirer**

Another group of approaches to internationalisation from a network perspective, focus on forces in the wider environment outside the firm. Gummeson (1996) distinguishes between market relationships (those that operate in the actual marketplace), nano relationships (those that operate between various elements within the firm and are internally directed), and mega relationships (those that exist between the firm and the
economy, the political situation, the society, the media and the government). Gummeson however, does not consider acquisition as being driven by market, nano or mega relationships. Ofusu and Holstiüus (1998) in their study of the international involvement of firms in Finland with firms in Ghana, argued that networks can operate at three levels. At the global level, networks are reflected in multilateral agreements and regulation, at the macro level in bilateral arrangements between countries and in government facilitation of export involvement, and at the micro level on activities within and between firms. They also do not address the issue of acquisition.

A paper by Anderson et al (2000), explores mergers and acquisitions. Although they discuss structural and temporal connectedness of business nets, they do so with respect to mergers and acquisitions jointly and, do not distinguish between the two, which is questionable, given the different nature of each. Whereas, at least initially, mergers involve collaboration between two parties and the creation of synergies, acquisitions involve one party being subsumed by the other and the acquirer imposing its will on the firm acquired. The comments of Anderson et al (2000) mostly apply to mergers, rather than acquisitions. They do however with respect to acquisitions offer the following:

*When the company is seeking a company to acquire, it is essential to evaluate the business relationships the potential partner has, and furthermore, to evaluate them as investments in the same way as brand name and goodwill are given a price. External relations of the target company provide access to resources of other companies. Simultaneously, they may restrict its room for manoeuvre, since obligations in one relation may hinder access to others.*

Finally, Mattsson (2000) also combines mergers and acquisitions in his consideration of the issue, although his comments mostly apply to mergers. He argues however, that international, integration of activities is an important element of firms’ internationalisation and that the original Uppsala model did not adequately cater for situations where the context of internationalisation might undergo a substantial internationalisation process itself as happens with international mergers. He advances the idea that because of this, there are strong reasons to take an embeddedness approach to the study of internationalisation. He points out that both pre-acquisition considerations and post-acquisition effects must take international interdependencies between firms and between markets into account.

Further, Mattsson (2000) cites various motives for mergers and acquisitions (which will be examined in the context of the case study that follows). According to Dunning (1997), they are as follows:

- rising costs of innovation and of entry into unfamiliar markets
- competitive pressures to be cost effective
- need to tap into complementary technologies
- capture expected economies of scale and scope
- desire to protect or advance global markets vis-à-vis oligopolistic competitors
- need to encapsulate the time of the innovating or market entry process
The only researcher to specifically address the issue of acquisition is Fosgren (1989). He examines the issue from both an internalization and a network perspective, and concludes the latter is more relevant to explaining acquisitions than the former. Whereas the former has as its focus export versus foreign direct investment, the network approach is better at explaining choices in mode of foreign direct investment such as those between ‘greenfields’ investment and acquisition. This is because it stresses the importance of other firms in the task environment (the net of suppliers, producers, innovators, users, etc) involved in developing, producing and marketing a specific product. Although Fosgren addresses the issue of acquisition, he does so from the perspective of the internationalisation of the acquirer rather than of the acquired.

One network-based approach that may be of relevance with acquisitions is that of embeddedness. This concept focuses on the actual business network being embedded in a framework of wider networks. These extend beyond the boundaries of the firm and may include social, institutional, infrastructural, technological, regional and market networks (Toornroos, 1997). Underlying the above are three dimensions (Halinan and Toornroos, 1998). The first is a ‘temporal’ dimension reflecting the fact that relationships and the networks in which they are embedded have histories, are operating in the present and are driven by aspirations for the future. The second is a ‘spatial’ dimension reflecting the fact that business activities are embedded in countries, groups of countries and wider regions. The third dimension is the representational dimension illustrating the fact that the actors in a business are viewed by others in the network as representatives of their firm, country and region. They can be change agents in the network as they bring to the network their experiences of other networks as well as their intentions for the future. The embeddedness approach would appear applicable to internationalisation via acquisition as the wider framework in which the business network is embedded creates the conditions for the acquisition.

METHODOLOGY

Given the nature of the problem being investigated, the case study method was employed. As Eisenhardt (1989) demonstrates, it is possible to induct theory using case studies and many of the features of the process such as problem definition and construct validation are similar to the hypothesis testing type of research. Other features such as within case analysis and replicating research are unique to the case method. Yin (1994) argues that case studies are especially useful in answering the ‘how’ and ‘why’ questions that research seeks to answer, and that case study research, if properly conducted, follows the normal research methodology of defining the problem, designing the form the research will take, collecting the data, analyzing the data and reporting the findings.

This case study is the continuation of a longitudinal case study that the authors have been conducting into the internationalization of the James N. Kirby Group over the last five years. Previous cases have covered the firm’s international involvement over a much longer period. The case described in this paper covers the latest episode in this longitudinal study. Kirby was initially identified and selected for in-depth analysis based upon its participation in two previous cross-sectional surveys in 1983 and 1994 of firms’ internationalisation in the Australian manufacturing sector [Barrett, 1986; Fletcher, 1996]. Previous cases have focused on the internationalisation of, firstly, the Refrigeration Division in 1997 and 1998 (Fletcher and Barrett, 2000), and secondly,
the Engineering Division in 1999 (Barrett and Fletcher, 1999). These cases provide an important context for the next stage of this ongoing study of Kirby’s internationalisation, namely, an analysis of the acquisition of Kirby, which is reported in this paper. Multiple sources of evidence were used - the principle source of information being interviews, was supplemented with documents and direct observation of office and factory premises. Interviews relating to the acquisition were with executives of the firm that was taken over (the CEO of James N. Kirby on 23/3/2000 and the Managing Director of Kirby Engineering on 10/5/2000) and with executives of the US take-over firm (Managing Director of Lennox Global Ltd, Australia on 10/4/2000 and Managing Director of Lennox Asia-Pacific, Singapore on 29/5/2000). A year later, to review how the acquisition had ‘settled down’, interviews were held with executives of Lennox Global Ltd, Australia on 15/2/2001, and with the CEO of James N. Kirby on 10/4/2001 (another interview is scheduled with the CEO of Lennox Corporation In Dallas on 5/7/2001). There was internal consistency between all of these interviews as far as opinions expressed relating to motives of both parties underlying the acquisition. Data was also collected from secondary sources, including company records (Annual Reports and Prospectus) and a strategic plan for Kirby Engineering. In addition, these sources were supplemented by direct observation of office and factory premises in Australia, the USA and Singapore.

**BACKGROUND TO THE ACQUISITION**

In late 1999, James N. Kirby Ltd, was acquired by Lennox International Inc of Dallas Texas, USA. The authors of this paper had been working with the Australian firm over a number of years on a longitudinal study of Kirby’s internationalisation. This acquisition came as a surprise, as from discussions with the firm, it was felt that if the firm were to be acquired by another firm, the most likely suitor would be their long standing licensor, Tecumseh of Michigan, USA.

**Lennox**

Lennox, founded by Dave Lennox in 1895 in Marshalltown, Iowa, is the oldest North American HVACR (heating, ventilation, air conditioning, and refrigeration products) manufacturer continuously operating under the same name. It was established as a family owned business to manufacture innovative heating furnaces for the US market. In 1904 the company was sold to the D.W. Norris family which continued the tradition of innovative new product and sales/distribution strategies which led to rapid growth. By the 1920’s, the company had expanded beyond Iowa to many regions of the US. In 1935, it pioneered the development and introduction of an innovative and highly efficient forced-air furnace for the residential market. By the early 1950’s, operations had been established throughout the US and Canada. Product innovations continued in the 1960’s, 1970’s and 1980’s as the company moved into the commercial heating and cooling market with high-efficiency products (including the development of the hermetic compressor in 1973, and the first high-efficiency gas furnace in 1982). The commercial refrigeration and heat transfer markets were entered in 1986 with the establishment of Heatcraft Inc. With the acquisition of Armstrong Airconditioning Inc. in 1988, the company entered the distribution market for residential heating and cooling products. Product innovations and growth continued in

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1 Johnston et al [9] argue that data collection from multiple sources (i.e. secondary data and a variety of informants) is important in case study research in order to allow for triangulation.
the 1990’s. In 1999, Lennox Retail Inc., a North American retail distribution network, was established offering full sales, installation, and service functions.

In 1995, Lennox Global Ltd. was established to exploit international opportunities as part of the company’s globalisation strategy. Up to that time, Lennox had little international experience. Joint ventures were established in Europe and Latin America, and acquisitions made in the Asia-Pacific region. By the end of 1999 Lennox had evolved into a leading global provider of climate control solutions with net sales of over US$2.3b (estimated to be US$4b by 2003), with sales in over 70 countries. In 1997 international sales accounted for 11.7% of total sales, rising to 26.7% in 1999. Lennox currently designs, manufactures and markets a broad range of products for HVACR markets. Its products, available in a variety of designs and efficiency levels, are sold through multiple distribution channels, under well-established brand names, including: Lennox, Armstrong Air, Ducane, Heatcraft, Bohn, Larkin, Superior, and Marco.

Figure 1 shows the key international relationships which have been developed as a result of Lennox’s strategic decision in 1995 to internationalise. Worldwide demand for residential and commercial HVAC products is increasing, especially in emerging markets and particularly for heat transfer and refrigeration products (e.g. increasing use of refrigeration products to preserve perishable products such as food). Refrigeration products generally have the same design and applications globally. To take advantage of such international opportunities, Lennox has made substantial investments in manufacturing facilities in Europe, Latin America and Asia Pacific primarily through acquisitions. Additional resources have also been invested in international operations with the goal of achieving manufacturing and distribution efficiencies comparable to that of the North American operations. For example, in 1996/7 Lennox established a sales and distribution operation in Singapore to service the countries in the Asia Pacific region. The Singapore office also has a business development function in line with the corporate acquisition strategy of international growth. These activities have resulted in the establishment of a wholly owned refrigeration (compressor racks) manufacturing operation in China.

Also, another important relationship was established, which partly impacted on Lennox’s deliberations when acquiring Kirby, with the acquisition by Lennox of Livernois, a US based machine tool manufacturer, supplying products to the heat transfer and automotive industries.
James N. Kirby
Kirby is involved in refrigeration, air conditioning, engineering and automotive activities. It is a family owned company with a turnover in 1998/99 of A$200 million and approximately 900 employees. It was established in 1924 to undertake machining operations. Its international involvement dates to the early 1960’s when it commenced exporting to New Zealand (1960) and to South East Asia (1962). By 1967, 25% of Kirby’s production was exported, 60% of which went to ASEAN countries. By 1994, its most important overseas markets were China, USA, Thailand and Japan. In the period from 1983 to 1993, the percentage of the firm’s turnover from international business increased from 2% to 18%. The firm engages in outward international activities (direct export, sales branch overseas, and production overseas to serve overseas markets), inward international activities (direct import, production overseas to cater for the Australian market, and licensing in the domestic market), as well as linked international activities (countertrade). By 1999, it had two overseas manufacturing plants and five overseas sales branches.

The history of both the Refrigeration and Engineering Divisions of James N. Kirby has been described in detail in previous papers (Barrett and Fletcher, 1999; Fletcher and Barrett, 2000). Figure 2 highlights the key international relationships of both divisions in the mid-late 1990’s.
The Acquisition
In 1999, both Lennox and James N. Kirby were endeavouring to increase their involvement in Asia. The former, as part of its change in strategy from domestic to global and, the latter, as part of a strategy to increase its existing involvement in the region. The awareness by each party of the other increased when both firms endeavoured to buy out the same firm in Thailand (a manufacturer of heat transfer parts and refrigeration coils). Rather than continue to bid against each other and drive up the price, the two firms decided to buy the plant jointly. This led to Lennox, forming a joint venture with James N. Kirby.

At this time, James N. Kirby, a family-owned firm for three generations, was having ‘family succession’ problems. The two brothers who ran the firm (Kevin and Raymond Kirby) were reaching retirement age, and there was uncertainty as to the ability and interest of the next generation of family members in taking over the firm. When Lennox then made an offer to buy out James N. Kirby, it was accepted. This development caused Lennox to change their internationalisation strategy for the region, which was Asia first and Australia second, to one where involvement in Australia preceded that in Asia.
In this context, James N Kirby was attractive as the Australian firm had considerable international experience. This was particularly in Asia but also in Europe through their Engineering Division. Furthermore, James N. Kirby had considerable international experience in the refrigeration and air conditioning sector, which, up to that time, had been the core business of Lennox.

The fastest growing division of James N. Kirby was their Engineering Division, which, through the firm’s supply of compressors for automobile air-conditioning, was strongly focussed on the automotive sector. Lenox viewed expansion into the automotive engineering sector as a logical extension of their current focus on automotive air-conditioning. There were also advantages to linking the two firms from a manufacturing perspective. James N. Kirby would bring to the arrangement manufacturing capability in the Asia-Pacific region which would enable Lennox to have an immediate production base from which to tap the Asian market.

A further analysis of the reasons and background to the acquisition reveal a better fit between the two organisations than may be apparent at first sight. James N. Kirby Engineering was a competitor in the USA with Livernois Inc. Livernois operated in the engineering sector of the automotive industry, and had been recently acquired by Lennox as part of the latters expansion from refrigeration into the automotive sector. In addition, Livernois had, prior to the acquisition, supplied the Lennox Heatcraft division. The acquisition of James N. Kirby would yield synergies from combining the distribution networks of Livernois and James N. Kirby Engineering in the USA.

In Australia, the major competitor of James N. Kirby in the refrigeration and air-conditioning wholesaling/distribution sectors was Lovelock Pty Ltd. This firm had recently been acquired by Lennox International Inc. Again, not only would the acquisition of James N. Kirby yield dominance of the Australian market, but also synergies due to combining the distribution networks of both Lovelock Pty. Ltd. and James N. Kirby (now known as the Wholesale Group of Heatcraft). Initially, it is intended that operations would be established in Asian countries to assemble product from components supplied by Heatcraft Australia. In the future, this relationship would change and, in view of their experience in establishing compressor plants in Asia, Heatcraft would become responsible for setting up full production plants in a number of Asian locations. In addition, the Australian operation would become the regional headquarters for supply of manufacturing plant, technology and R & D. The marketing of the output of these plants would not be undertaken by the Australian operation but by a new office established in Singapore, Lennox Global Asia-Pacific. This office would also take over control of all exports from Heatcraft Australia, other than those of Kirby Engineering and those destined for New Zealand.

As far as automotive is concerned, Lennox International Inc have made Kirby Engineering Division responsible for Lennox’s future expansion in this sector in the USA, and they will acquire new manufacturing facilities in that country for the Lennox group. The major focus of Kirby Engineering will be the USA market, with less attention being paid to the European and Asian markets. Lennox, with the acquisition of James N. Kirby Engineering, now has access to metal cutting and metal forming expertise, as well as access to new networks in the automotive sector in Europe, which the Livernois acquisition did not provide.
As mentioned earlier, Dunning (1997) suggests a number of motives for mergers and acquisitions. Those that applied in the case of the acquisition of James N. Kirby by Lennox were as follows.

- **Rising costs of innovation** – this was a factor as Lennox wished to acquire the technology of the Australian firm, especially in the engineering sector so as to avoid creating their own from scratch. Also given the lower labour costs and the exchange rate to the $US, it would be cheaper to carry out further innovation in Australia. This is reflected in the decision to use the acquired Australian operation as the R&D centre for Asia.

- **Entry into unfamiliar markets** – this was a most important factor as the internationalisation strategy of Lennox embraced Asia which was a region in which Lennox had little experience compared to the considerable experience of James N. Kirby in the area with complementary products and technology. The Australian firm’s experience included selling, establishing joint ventures and providing turn key plants.

- **Competitive pressures to be cost effective** – this issue underlay the internationalisation activities of Lennox. In particular, the acquisition improved the cost effectiveness of the firm in both its sourcing new technologies and in its research and development activities. Lennox also viewed the acquisition as a way of improving the margins on their products due to the expected rationalisation of activities.

- **Need to tap competitive technologies** – this is manifested in the fact that the Australian firm had a number of technologies that complemented the current activities of Lennox in the heating, refrigeration and air-conditioning sectors. Lennox also wished to gain access to leading edge technologies possessed by Kirby. Furthermore, the acquisition was driven by a desire to obtain synergies from the R & D activities of both organisations.

- **Capture economies of scope and scale** – very definitely this was an underlying factor. The acquisition resulted in a restructuring of operations from separate company activities (Kirby; Lovelock and Lennox) to functional divisions under the umbrellas of wholesaling and technology. The former yielded economies due to rationalisation of the distribution of both Kirby and Lovelock refrigeration products. The latter yielded economies due to the functional separation under the technology umbrella of heat transfer, refrigeration, engineering, New Zealand activities and Thai activities. These economies included supply chain management and logistics.

Overall, this acquisition supports the view of Dunning (1997) that an increasing proportion of mergers and acquisitions over the last decade have been driven by a desire to acquire new ownership specific advantages rather than to exploit existing advantages. This is reflected in the fact that the acquisition provided Lennox with a resource base from which to tap the Asian market, a new field of endeavour (engineering) with which to increase activities in its home market of the US, as well
as to strengthen its internationalisation activities in Europe, and a facility capable of providing turn key plant to firms on a world wide basis in both the refrigeration and automotive sectors.

Figure 3 shows the key relationships resulting from the acquisition of James N. Kirby by Lennox.

**Figure 3: Lennox and James N Kirby – the New International Networks 2001**
THE FIT BETWEEN FIRMS’ ACQUISITION AND THE NETWORK PERSPECTIVE ON INTERNATIONALISATION

Given the earlier literature review, the embeddedness framework developed by Tornroos (1997) was applied to the circumstances surrounding the acquisition of James N. Kirby Ltd. The international business network of James N. Kirby, now known as Heatcraft Australia Pty. Ltd., is considered in terms of its coupling to infrastructural, social, market, regional, technological and institutional networks.

Infrastructural networks: The Kirby family had run the firm for three generations and there were many long serving employees (including the Managing Director and General Manager - Engineering) who had been with the firm for more than 40 years. However, when problems of family succession surfaced in 1999, the favourable take over bid of Lennox was accepted. The acquisition created synergies between the distribution arrangements in Australia of two previously competing firms – Kirby Refrigeration and Lovelock. It also led to a rationalisation of manufacturing activities between these two producers of similar ranges of refrigeration equipment.

Social networks: Granovetter (1973), argues that whereas strong ties between individuals and groups stabilize relations in social networks, weak ties between those involved stimulate change as competitors find it easier to enter established networks. In the case of James N. Kirby, strong ties operated between the firm and its employees and between managers in the firm and those firms it was involved with in other countries. Underlying the social networks was a commonality of values between the Kirby family in Australia, the Herrick family of Tecumseh in the USA and the Simakulthorn family in Thailand. Strong ties of this kind led to trust between the actors in the various networks. Both James N Kirby and Lennox (the acquiring firm) were family owned companies that operated on the basis of trust as far as inter-firm relationships were concerned. This similarity in corporate culture facilitated the attractiveness of the proposed arrangement and increased its appeal to both parties. Each of the firms in the social network involving James N. Kirby, was viewed as having broad social links in the country of operation and each brought to the relationship the assets of knowledge, information and experience which influenced the attractiveness of James N. Kirby to Lennox.

Market networks: Participation by Kirby in a variety of international trade shows, Australian Government Trade Missions, and other customer creation and retention activities, resulted in the firm having an established presence in a number of market related networks in various countries. These together with the market related assets of Kirby were attractive to Lennox, especially the market networks the firm had in Thailand, China, other parts of South-East Asia and to a lesser extent India and Korea. Another market related asset was the proven ability of Kirby to build and operate plants in Asia. Within Australia, both Kirby and Lennox were already embedded into the refrigeration network due to the Lennox purchase of Lovelock from Email in 1998. The acquisition gave Lennox access to low labor cost compressors from Thailand that they could distribute via their established networks in other countries and in the process supplement the range of products they offer in the US and other markets. The Lennox purchase of Livernois at the beginning of 1999 also created a market network that yielded synergy with the acquisition of James N. Kirby due to the automotive division of the latter. This was because Livernois made radiators for the
automotive industry and was Lenox’s first venture into this sector. There was a pre-existing network between Tecumseh and Lennox in the US with the former being a major supplier of certain refrigeration components to the latter. This relationship would have created knowledge of the Kirby operations in Asia amongst Lennox personnel.

**Regional networks:** Kirby had regional networks in Australia, Asia (both China and Thailand) as well as in the USA as far as refrigeration was concerned and in Europe, Asia (Japan and Korea) and in the USA for automotive machinery. As such, acquisition of the firm would provide the purchasers with an established position in all major trade groupings in the world as well as a major presence in the Australia/New-Zealand market. This was attractive to a purchaser wishing to globalize at a time when manufacturers and suppliers were endeavoring to integrate their activities and resources across national boundaries leading to partnerships in the automotive industry such as that between Daimler-Benz and Chrysler. Up to the time of the acquisition, Lennox had been manufacturing refrigeration and air-conditioning products in Europe (France and Czech Republic), South America (Brazil) as well as in the US. The acquisition of the Australian firm enabled Lennox not only to enter the Asian and Australian markets but also to ‘Asianise’ companies within the Lennox Group. As far as the automotive sector was concerned, the acquisition of Kirby enabled Livernois to expand their focus beyond the US to Europe.

**Technological networks:** In the Australian market, Kirby had been forced because of the small market size, to adopt ‘lean manufacturing’. This meant that the Kirby system of creating a single machine tool capable of machining multiple configurations of the same part for different models was leading edge as far as new manufacturing technologies were concerned, especially those focussing on customization as opposed to standardization. Such technology was ideal for a firm planning to enter the automotive industry. Specific areas where Kirby operated at the leading edge involved the machining of aluminum as opposed to steel parts, the incorporation of CNC digital controls combined with linear motors, faster chip removal rates and the use of diamond cutting tools. The acquisition enables Lennox to use Kirby in Australia as their R & D center for the region. They plan to transfer technology from US and Europe to the Australian operation, have it tailored to the region and then shipped out to operations in Asia.

**Institutional networks:** James N. Kirby exploited these very effectively especially at the government level. They involved using the trade relations activities of the Australian Government to have their problems addressed by the Thai government, the winning of government sponsored ‘Export Awards’, and frequent receipt of both export incentives and Research and Development Grants. Both Kirby and Simakulthorn belonged to groups fostering trade between Australia and Thailand and both were well connected to their respective governments. Furthermore, the above together with involvement in industry associations, resulted in the acquisition of valuable networks by Lennox in both Australia and the Asia-Pacific region.

**CONCLUSION**

Utilising the notion of network embeddness assists in explaining the acquisition of James N. Kirby as part of the dynamic evolution of firms and industrial markets in a
global context. As a result of the acquisition, Kirby has become embedded in new business networks reflecting new and changed relationships. From an internationalisation perspective, as far as the firm being acquired, the acquisition changed rather than eliminated its international involvement. The Australian operation ceased to be involved in direct exporting other than to New Zealand and it is no longer responsible for liaison with Kulthorn Kirby in Thailand. Regional international activities were transferred to the Lennox office in Singapore. The engineering division ceased to be directly involved in marketing automotive and refrigeration plant in the US, Europe and China and acted as a support group for the area sales division of Lennox. Its support role also involved the Australian operation acting as an R&D centre for the region.

Whilst the international activities of the acquired firm were subordinated to the overall internationalisation program of the acquiring firm, they continued in a different form. Whereas, formerly, the Australian operation’s international involvement took the form of exporting and establishing joint ventures, now its focus is on providing technical support, R&D and turnkey manufacturing plants to overseas operations of the Lennox Group. In this sense the acquisition was not the end of the road as far as the Australian operation was concerned, but rather a new beginning.

As far as the acquiring firm was concerned, the acquisition extended the international involvement of Lennox, both by region (ie into Australia/New Zealand and Asia) and by product (ie engineering capital equipment). It enabled expansion of its overall dependency on international business as well as rationalisation of its existing international activities in the process of integrating the pre existing international activities of James N. Kirby. As such, it represented a ‘new beginning’ from the perspective of the overall internationalisation of the Lennox Group.

From a management perspective, a study of the networks in which the firm is embedded, provides indicators of potential strengths and weaknesses, allies and competitors and ultimately of potential acquirers. An ongoing monitoring of these embedded networks is a useful way of spotting future constraints and opportunities arising from proactive internationalisation activities.

**REFERENCE LIST**


