

8 Benefits and different forms of cooperation

This chapter considers the benefits obtained by firms involved in different forms of cooperative arrangement (following the format of Chapter 5). The forms of arrangement are classified by intensity (amount, number of partners in arrangements, the formality of arrangements) and by the nature of the partner firms – whether these are customers, suppliers or other firms, or whether they are overseas or domestic partners.

In estimating the benefits flowing from particular arrangements, it is sometimes difficult to be sure about true causes and effects. For example, it is impossible to isolate the benefits obtained by firms from their customer arrangements if they also have supplier arrangements. But if we are to correctly ascribe certain benefits to a particular form of linkage we need to be sure the effects of other forms are excluded.

This problem has been approached by focusing the analysis on firms with exclusive arrangements¹. For example, to find out about the benefits of cooperating with customers, we examine those firms which *only* have customer arrangements (there is no cooperation with suppliers or other firms to confuse the issue). The same approach is then adopted for a second group of firms with exclusive supplier arrangements and a third group which only have arrangements with ‘other’ firms. Finally, a fourth group exists which is made up of firms which have some form of combination of arrangements; for example, an arrangement with both a supplier and a customer.

The assessment of the benefits associated with different types of business cooperation is structured as follows. Section 8.1 reports and analyses how benefits vary with the intensity of cooperative arrangements. Section 8.2 discusses the effect of different linkage ‘partners’ on cooperation benefits. In Section 8.3, the relevance of different linkage partners to cooperation benefits is extended to certain characteristics of partner firms in the ‘key’ cooperative arrangement (which is discussed more fully in Chapter 9). Section 8.4 briefly looks at the results of modelling the benefits data for both types of cooperative arrangement and firm characteristics. Section 8.5 presents a summary of the chapter.

8.1 Benefits and the intensity of the arrangements

In Chapter 5, we assessed the ‘intensity’ of a firm’s business cooperation activities according to three criteria – the number of cooperative arrangements the firm has, its tendency to cooperate on the basis of one-to-one or multi-firm arrangements and its preference for formal or informal arrangements. The benefits associated with these different degrees of cooperation intensity are considered in turn below.

¹ The exception to this approach in this chapter is for firms with overseas and domestic arrangements. Due to the format of the survey form it was not possible to ascertain which firms had arrangements solely with overseas partners.

8.1.1 Number of arrangements

If inter-firm cooperation is generally beneficial, a reasonable hypothesis would be that firms involved in at least two arrangements (for example, one with a customer and one with a supplier) might benefit more than firms with only one arrangement. On the other hand, a firm with only one arrangement, but one of great strategic importance, could be expected to bring in larger returns than a firm with two or three minor linkages. Clearly, quality as well as quantity is a factor in determining the overall benefits of inter-firm cooperation.

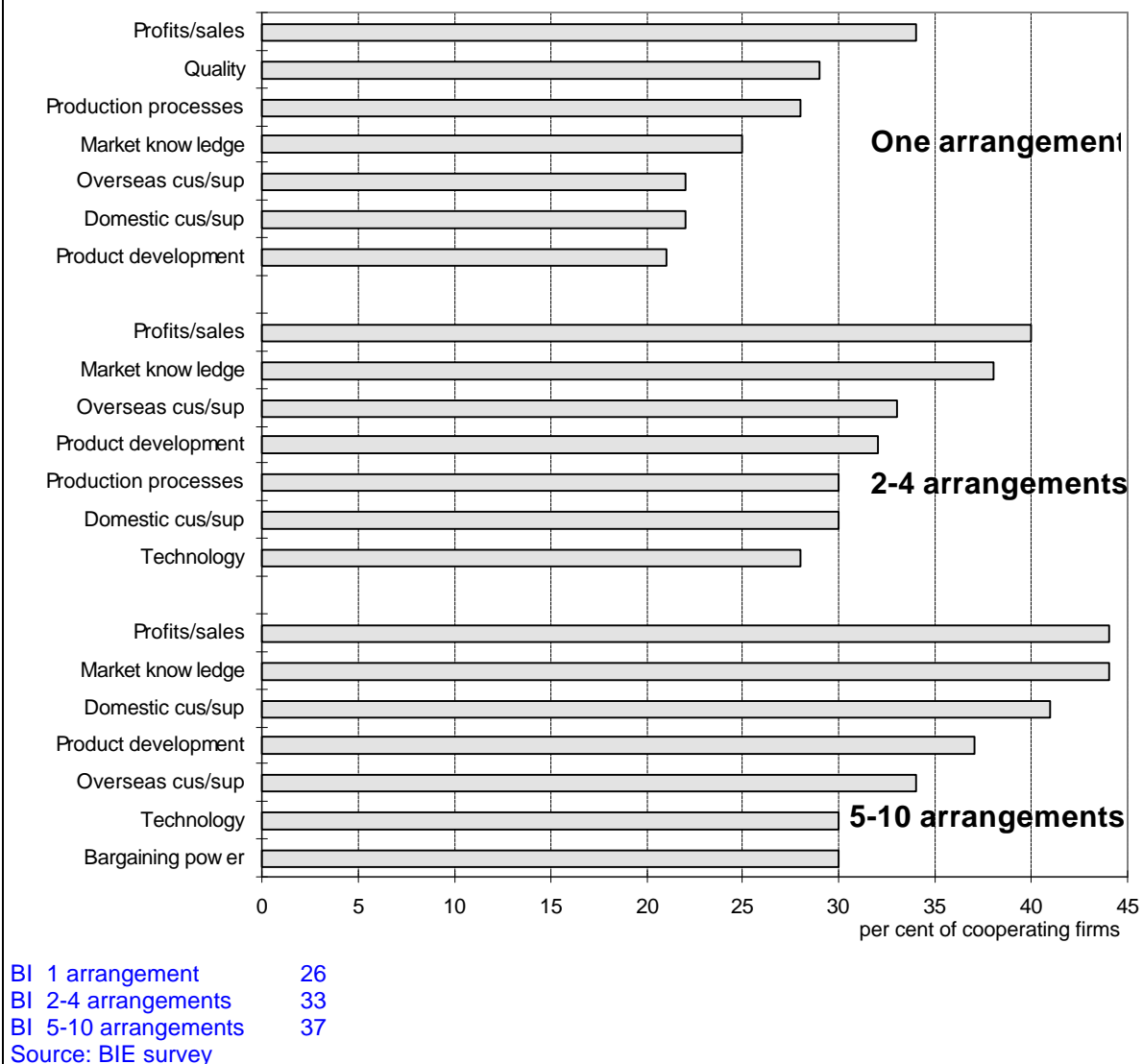
According to the survey results, those cooperating firms with five to ten² arrangements are benefiting the most from their inter-firm linkages (Figure 8.1). These firms score 37 on the Benefit Index³ (or BI), compared to a BI of 33 for firms with two to four arrangements and a BI of only 26 for firms with single arrangements.

Firms with large numbers of arrangements obtain higher levels of benefits in all categories except for quality and improved production processes. In particular these firms realise many more benefits from new domestic customers or suppliers than firms with fewer arrangements. The rungs on this ladder of benefits are set wide. Thus, 41 per cent of firms with five to ten arrangements access new markets or suppliers. This falls to 30 per cent for firms with two to four arrangements and 22 per cent for firms with only one arrangement. Firms with many arrangements are also much more likely to benefit from product development and market knowledge.

Overall it is hard to avoid the conclusion that firms with just one linkage may be disadvantaging themselves by not forming further arrangements. The high level of importance these firms place on improved quality and improved production processes suggests a somewhat 'limited vision' of what they wish to achieve out of inter-firm cooperation. This would be consistent with firms fairly new to special relationships finding their way cautiously and looking for limited benefits in key areas.

² As discussed in Chapter 5, those firms with more than ten arrangements have been excluded from this analysis as there is some doubt as to the accuracy of these numbers.

³ See Section 6.1.3 for an explanation of the 'Benefit Index'.

Figure 8.1 Major benefits of cooperation, by number of arrangements

That the level of benefits increases with the number of arrangements could be explained by the point that the more arrangements a firm has, the more opportunity it has to obtain benefits across a diverse range. In one arrangement it might achieve major market knowledge benefits, for example, and in another it might obtain significant new overseas markets. When its linkages are aggregated, the firm is seen to do well over a number of areas. Box 8.1 highlights the advantages of having many cooperative arrangements, including the likelihood of receiving spin-off benefits.

A more intriguing explanation for some firms might be that they gain the same types of major benefits from each of their linkages, but get a higher degree of benefit due to economies of scale and scope. The more they cooperate, the more they learn and the more they benefit.

Box 8.1 More arrangements, more benefits

Linkages are often vital to firms in the IT&T industry. Security Domain, a small Sydney company, has forged a number of cooperative arrangements since it was formed in 1989.

Security Domain undertakes R&D in smart card technology as applied in information security, EDI and telecommunications. It also offers consultancy, training and application development services. From its earliest days the company has had a strategy to form numerous alliances, recognising that the industry is too complex and dynamic for one small firm to try and succeed single-handed.

Two of Security Domain's key linkages are with local telecommunications company, Telstra, and the French smart card manufacturer, Gemplus. It also has cooperative arrangements with P&O Holidays, Intellect Australia and Zergo Limited.

Security Domain benefits widely from its multiple arrangements. Critical benefits have been product development (Telstra) and overseas distribution (Gemplus). It has also gained vital knowledge of the industry and of domestic and overseas markets. Other major benefits have been obtaining new customers, technology transfer and access to financial resources.

Source: BIE interview

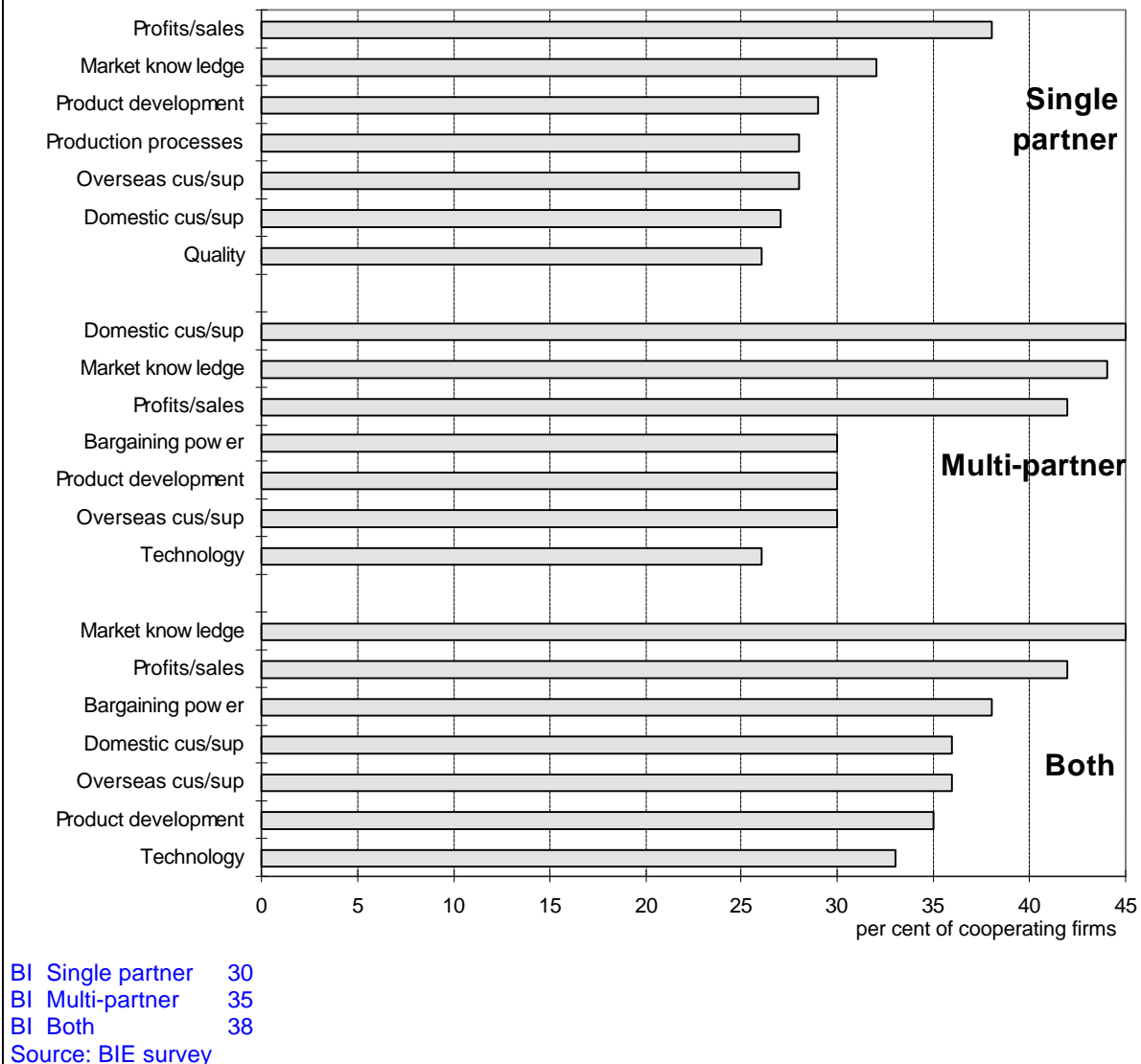
8.1.2 Number of partners in the arrangement

A firm in a network-type relationship with at least two other firms may be more focussed on the prospective benefits as it has almost certainly gone to more trouble to form and maintain such an arrangement. In addition, arrangements involving at least three firms have generally been put together with a very specific objective and corresponding benefits in mind. On the other hand, there may be special benefits from single partner arrangements because of the closeness of the relationship.

Two-thirds of cooperating firms in the survey have single partner arrangements (and no multi-partner arrangements), 13 per cent have multi-partner arrangements (and no single partner arrangements), and the remaining 20 per cent have a combination of single and multi-partner arrangements.

The benefits resulting from the two types of arrangement are shown in Figure 8.2. One-to-one linkages appear to provide lower benefits overall than multi-firm linkages. Firms are better off cooperating exclusively by means of networks, but even better off with a combination of networks and one-to-one linkages. In the latter case, it seems they get the best of both worlds; the close working relationships and the focus on results. Another explanation could be that benefits are higher for firms with combined arrangements simply because they may have more arrangements (they must have at least two).

The leading benefits for firms in multi-partner arrangements are new domestic customers/suppliers and market knowledge. The proportion of firms benefiting is much higher than for one-to-one arrangements. For example, whereas almost half of the firms in networks access new domestic markets or suppliers, only around one quarter of the firms in single-partner linkages obtain this benefit. However, benefits relating to profits, new overseas customers/suppliers and product development are similar.

Figure 8.2 Major benefits of cooperation, by number of partners in arrangement

There are two differences in the leading benefits of the two groups. Single-partner arrangements are more likely to result in improved production processes and have a slight edge with regards to quality. On the other side, firms in multi-partner arrangements benefit greatly from strengthening their bargaining power (30 per cent compared with 21 per cent in single-partner relationships) and are more able to access technology as a result of their linkages.

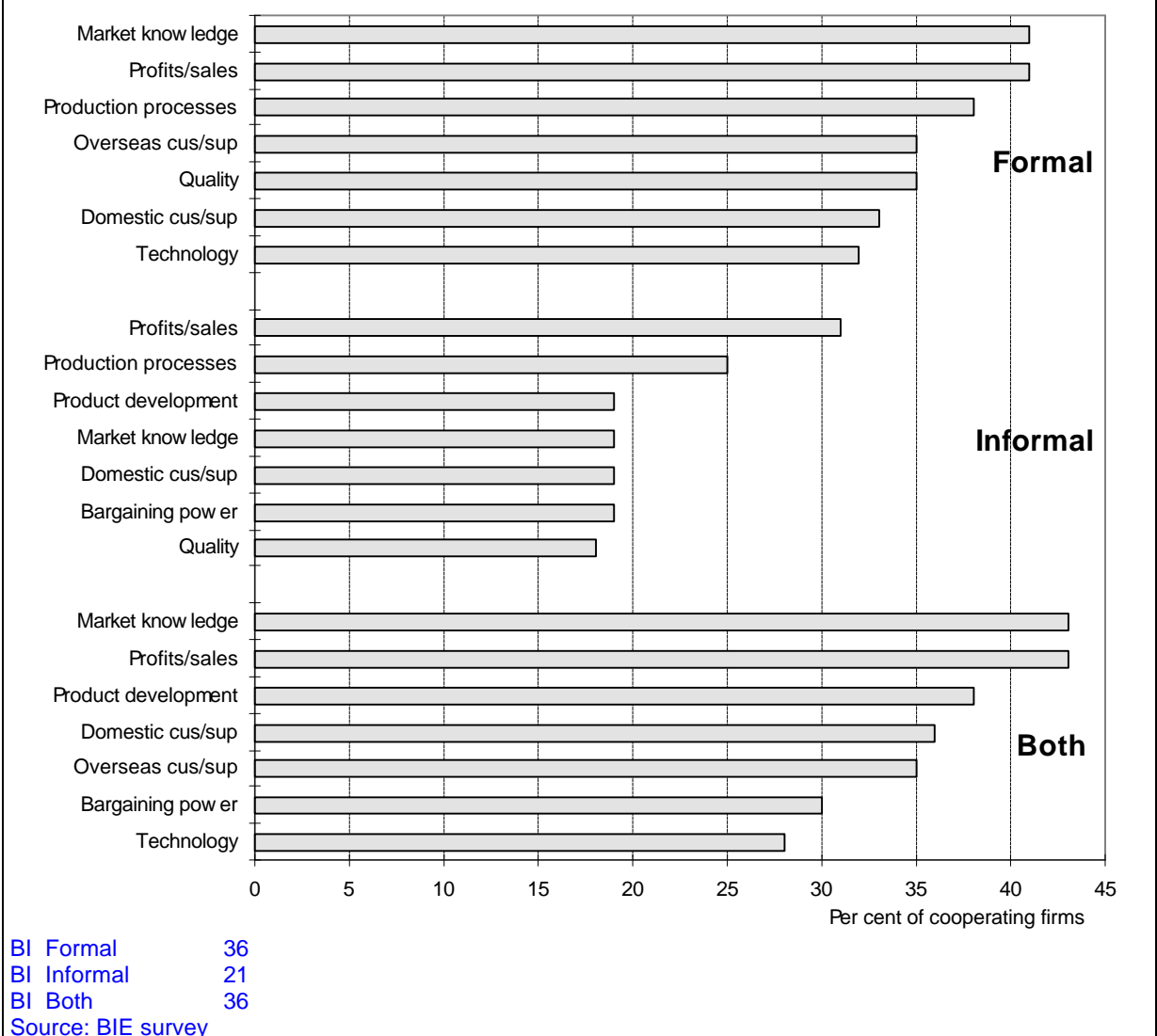
But how do the benefits vary for firms which exclusively use multi-partner arrangements and those with a mix of arrangements? We find the same seven benefits matter, but with different rankings and scores. Bargaining power, technology access, product development and overseas customers/suppliers are all substantially stronger for firms with combined arrangements (although new domestic customers/suppliers are substantially weaker).

The results for firms with multi-partner arrangements provide an indication of the benefits provided by AusIndustry's Business Networks Program. This major initiative encourages firms to create cooperative arrangements with at least two other firms to increase their competitiveness and capabilities. Government-funded network programs are discussed in Chapter 13 and Appendices D, E and F.

8.1.3 Formality of the arrangements

Firms participate in formal and informal cooperative arrangements in fairly even numbers (see Chapter 5). The major benefits associated with the formality of arrangements have been classified into three groups: firms with only formal arrangements, firms with only informal arrangements and firms with a both.

Figure 8.3 Major benefits of cooperation, by formality of arrangements



The very clear underlying message from a comparison of formal and informal linkages is that those firms focussed only on formal arrangements receive benefits way in excess of firms in looser alliances (Figure 8.3).

The only benefit where ‘informally cooperating firms’ get anywhere near ‘formally cooperating firms’ is increased profits/sales. However, there is still a gap of 10 percentage points in the degree of benefits. Otherwise, close to twice as many firms with formal links than informal-linked firms are benefiting from cooperation.

We found a high proportion (38 per cent compared to an average 28 per cent) of firms in formal arrangements benefit from better production processes. Improved product quality is the other ‘surprise’ benefit for firms in formal arrangements, with about one third of firms listing it as a major outcome of cooperation. Significantly, this is well above the ‘normal’ proportion of firms which receives quality improvement from their cooperative arrangements.

A substantial proportion of the firms with improved production processes and improved quality are likely to be achieving these benefits as positive side-effects of their arrangements. Box 8.2 shows how one firm has acquired a variety of benefits from its formal arrangements.

Box 8.2 Firms are more likely to benefit through formal arrangements

ERG Ltd is a public company with an annual turnover of around \$100m and export sales worth around \$25m. The company manufactures, markets and installs electronic ticketing and communications equipment.

The majority of ERG’s cooperative arrangements are governed by contracts. Being a large company means there is a tendency to formalise matters, but there are a number of other reasons why the formal approach is preferred:

- . there are significant amounts of money involved*
- . the large companies ERG deals with tend to require formal arrangements*
- . the agreements sometimes involve third parties.*

ERG believes that legal contracts ensure a greater commitment by the participating firms to make things work. A formal arrangement with its emphasis on precision and details, can also lead to firms helping each other in ways not necessarily envisaged. ERG has received an ‘all round package’ of benefits from working closely with its partners in most facets of the firm’s operations. Enduring benefits (and ones with clear spin-offs into other areas of ERG’s business) have been a greater emphasis on quality and raising the standard of production.

Source: BIE interview

Other factors deserve special comment. The first is the absence of product development from the top seven formal arrangement benefits. This is a little surprising in view of the usual prominence of product development as a major benefit of cooperation. However, at 28 per cent, the benefit level of product development in formal arrangements is in fact only slightly below average. Another notable absentee, this time in the top informal benefits, is new overseas customers/suppliers, which is a major benefit for only 17 per cent of firms linked informally.

In some respects it is logical that firms who only have informal arrangements may not put in as much effort as the formally-linked firms. Maybe the greater benefits in formal arrangements are commensurate with the greater degree of preparation time and importance that is attached to these relationships.

Another explanation for the relatively better performance of formal arrangements is that they tend to be associated more with larger firms and with the complex forms of cooperation at the right hand side of the cooperation continuum⁴ :

⁴ The cooperation continuum is described in Chapter 2.

- large firms have a greater tendency to formalise as a matter of course and large firms are the most likely to benefit from business cooperation; and
- joint ventures, strategic alliances and formal networks are usually much more complex than ‘softer’ forms of cooperation and involve bigger stakes, and accordingly firms would have a greater expectation of benefit and over a wider range.

The greater likelihood of benefits in formal arrangements does not of course mean that informal arrangements do not work. A substantial number of firms still obtain benefits from loose arrangements with other firms. The results can be just as spectacular as formal business cooperation in some cases (see Box 8.3).

Box 8.3 Informal benchmarking and improved production processes

Florsheim Australia is one of Australia’s leading producers of quality men’s shoes and competes in a market where the quality and style of the product is fundamental for success. In the top end of the market they compete with the world’s finest shoe manufacturers. With the lowering of tariff protection competition has intensified.

An integral aspect of Florsheim’s strategy to stay ahead is working informally with other shoe manufacturers to improve their production processes and quality. While Florsheim does not work with direct competitors, it finds it very useful to link with other companies such as Diana Ferrari (which produces women’s shoes) to benchmark common processes, talk about the quality and supply of materials and so on.

One example of how cooperation has benefited Florsheim is that it has cut its work in progress in half, enabling it to respond more quickly in a market where changes in demand for particular styles and designs are the rule rather than the exception.

Source: BIE interview

The 45 per cent of firms which have a combination of formal and informal arrangements get about the same benefits as firms with exclusive formal arrangements – which further underlines the value of formal relationships. Firms with informal arrangements can still achieve high benefits overall providing they have at least one formal arrangement.

Comparing the major benefits for firms with formal only links and firms with combined links, the key differences are the inclusion of product development and increased bargaining power for firms using mixed arrangements at the expense of improved production processes and improved quality. The demise of improved production processes is a little mysterious in view of its high ranking for both exclusive formal and informal arrangements. The 38 per cent of firms benefiting from product development from combined formal and informal linkages is quite striking. It compares with 28 per cent in exclusive formal linkages and 19 per cent in exclusive informal links.

8.2 Benefits and the nature of the arrangement partners

We turn now to the benefits of cooperation with different sorts of partners:

- are the firms customers, suppliers or ‘other’ firms?
- are they located in Australia or overseas?

8.2.1 Customers, suppliers and other firms

The value of linkages with customers and suppliers is of topical interest. Two recent studies by the AMC, *Leading the Way* (1994) and *The Wealth of Ideas* (AMC and McKinsey 1994) have both highlighted the importance of customer and supplier relationships in improving the performance of Australian manufacturing firms, specifically with regard to international best practice and innovation.

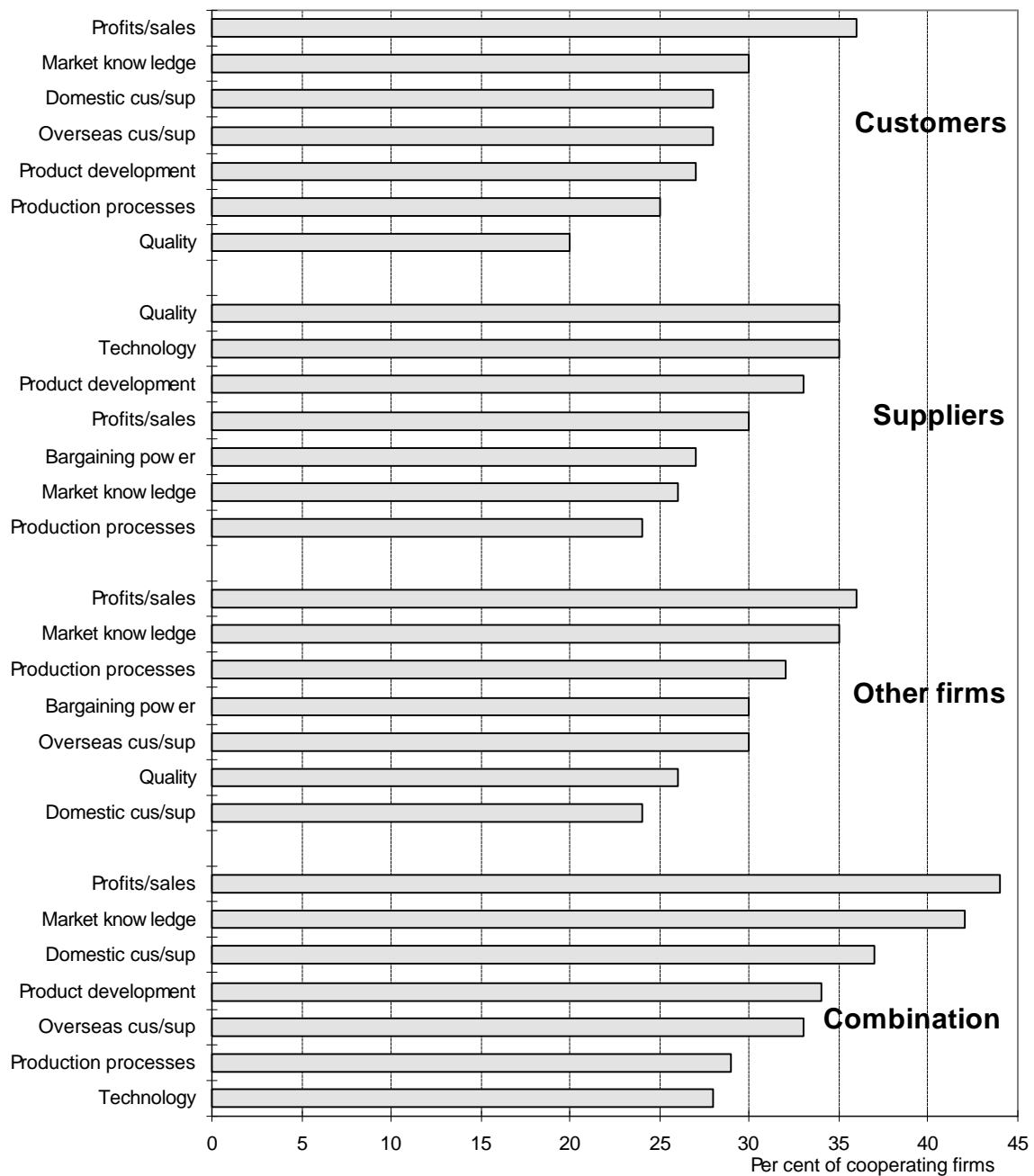
Over half of the cooperating firms identified in the BIE Survey have a combination of linkages with customers, suppliers or other firms. Relatively small proportions have customer only and supplier only linkages (15 per cent and 13 per cent respectively). Linkages with other (non-customer or supplier) firms make up the remaining 20 per cent of cooperative arrangements.

We found little difference in the overall magnitude of benefits obtained through exclusive relationships with customers, suppliers or other firms. (Figure 8.4). The slightly lower Benefit Index for customer relationships is not significant, although the level of benefits obtained through customer linkages drop away fairly steeply near the bottom of the major benefits list.

Looking at the composition and rankings of the groups, firms with customer arrangements closely track the leading benefits for the average firm, but with slightly lower proportions of firms obtaining the benefits. Box 8.4 gives an example of a firm benefiting from working with its customers.

Some substantial differences occur for the types of benefits obtained in the different arrangements. Most notable is the 35 per cent of firms with supplier linkages that gain benefits through access to technology, compared with the 15 per cent of firms in customer relationships. There is nothing particularly unexpected of course about this result. However, the same cannot be said about the contrasting importance of improved quality.

Figure 8.4 Major benefits of arrangements with customers, suppliers and other firms



BI Customers 28
 BI Suppliers 30
 BI Other firms 30
 BI Combination 35
 Source: BIE survey

Box 8.4 Working with a key customer

Seekers Australia has been around for 25 years and currently employs 100 staff. It manufactures swimwear and associated casual wear. Most of its sales effort is focused on the Australian market it is a market leader for fashion swimwear but it also exports considerable volumes to New Zealand and small quantities to Singapore and Japan.

Seekers has a licensing agreement with Jantzen (USA) to manufacture and sell its products in Australia. It also has a very important cooperative arrangement with a leading Australian retail chain. This latter arrangement is a prime example of how customers and suppliers can work together for mutual interest and benefit.

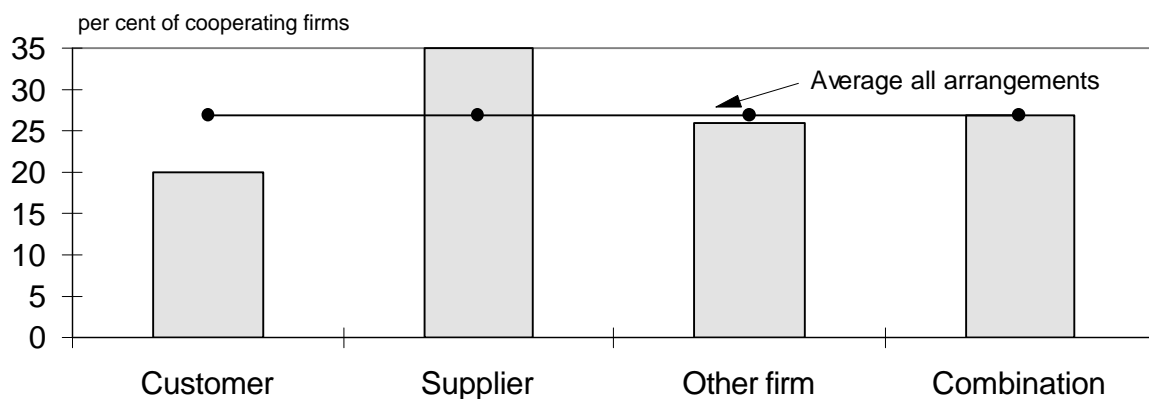
Seekers is a preferred supplier to the retailer. It develops a swimwear business plan in conjunction with the retailer and the companies hold numerous follow up discussions to get the designs right and the production schedules finalised.

The benefits to Seekers are several. There is an obvious financial benefit in having a supplier arrangement with a major retail company. But the other benefits of working together help contribute to improving Seekers' overall performance. The company learns vital information about its markets by talking with the major retailer at the sharp end of the production/retail chain. It gets ideas for refining its products and developing new ones. It has also become more aware of the significance of changing technology requirements, especially the use of Electronic Data Interchange.

Source: BIE interview

Quality enhancement emerges as the most important benefit to firms in supplier relationships and yet only 20 per cent of firms with customer linkages regard it as a significant benefit of cooperation (Figure 8.5). The formalisation of arrangements is the only other linkage characteristic which appears to be particularly related to quality enhancement. However, supplier arrangements are not formalised any more frequently than are customer arrangements.

Figure 8.5 Quality enhancement in arrangements with customers, suppliers and other firms



Source: BIE survey

A firm dealing with one of its suppliers will often have the advantage over the supplier in being able to insist on certain standards and specifications. This in turn may be reflected in the quality of its own outputs. The quality enhancing aspects of customer relationships in some respects should mirror those of supplier

arrangements. This time the firm's customer should be placing pressure on the firm in question to get things consistently right and to deliver high quality input.

One implication of the survey results might be therefore that customers are tough in securing gains *for themselves*, but:

- Do not share with the supplier the gains from quality improvements made by the supplier; and
- Do so without actually increasing the efficiency of the supplier. For example, a customer might insist on rapid supply or no fuss replacement of lower quality inputs, but leave the basic production processes of the supplier untouched.

Either way such one-sided arrangements are not fundamentally cooperative, nor do they really yield the full gamut of efficiency gains that can flow from good feedback from customers to suppliers. AMC and McKinsey (1994) notes the relationship between customer demands and performance improvement in a variety of areas, including quality:

Leading-edge customers raise expectations of suppliers on all dimensions – cost, quality, time and customer responsiveness. Meeting these expectations helps firms stay ahead of the game, and pulls them up the performance curve. In all industries we studied, most of our emerging exporters believe customers have been very important or critical in raising their performance over the past five years. (P.10)

As already noted, we found that it is firms with supplier arrangements who are obtaining the greatest benefits out of improved quality. This, along with technology access, are the two leading benefits of working cooperatively with suppliers. Box 8.5 provides an example of the advantages of close links with suppliers.

Box 8.5 Working closely with suppliers

Vax Appliances (Australia) is a subsidiary of Vax Appliances (UK). It has annual sales of between \$20-\$25 million and employs around 100 people. The company faces vigorous competition in the local market for vacuum cleaners.

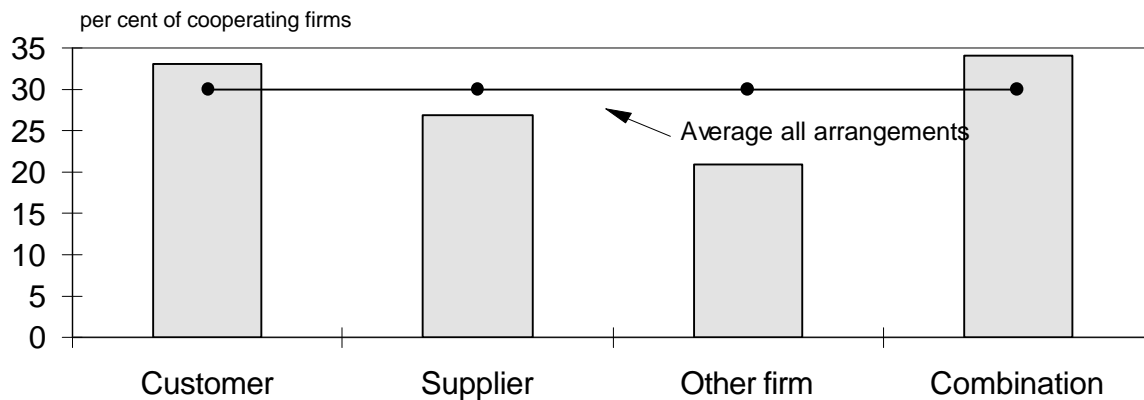
Vax has numerous preferred supplier arrangements operating on a short term basis. It also has three major component suppliers – motors, hoses and casings – with whom it works very closely. These three key arrangements, which have been in place since 1988, are all informal and based on trust and honour.

The key benefits of Vax's principal supplier arrangements are technology access, market knowledge and product development. On the latter point, Vax is continuously looking for improvements and provides a lot of input into how its suppliers produce their products. The degree of cooperation extends to Vax approving components before they are manufactured by the suppliers.

Source: BIE interview

Product development, with its innovation connotations again features (like quality improvement) much more on the supplier side of relationships. That is, customer firms are apparently working in partnerships with key suppliers to develop and improve their products. However, somewhat paradoxically supplier firms in the survey do not seem to be working to the same degree with their customers to improve their own products (Figure 8.6).

Figure 8.6 Product development benefits in arrangements with customers, suppliers and other firms



Source: BIE survey

Firms with relationships outside customers and suppliers lack the closeness and proximity of these linkages and not surprisingly do not get so involved in product development. However, we found that firms who forge links outside customer/suppliers get larger benefits from improved production processes. In the previous section we noted that these benefits are a major feature of formal arrangements and there clearly may be some correlation between these two results.

Box 8.6 Controlling the value chain

Women's fashion footwear is a highly competitive industry, with competition from both local firms and imports. J. Robins and Sons, the manufacturer of the Sandlers label, is one of the big players with around 900 workers employed in its factories.

The company's business strategy is strongly focused on a key arrangement with its major supplier, and a customer arrangement involving a national retail department store.

J. Robins gets 85 per cent of its leather purchases from one local supplier. The relationship has evolved over 7 years and is absolutely critical to the firms operations. The benefits of the arrangements are security of supply, highly efficient JIT delivery, improved quality and product development. Despite the strategic importance of the linkage it has remained informal, relying on trust and the fact that high mutual benefits are involved.

On the other side of the value chain, J. Robins' preferred arrangement with the retail chain has also many major benefits. It has enabled J. Robins to take a bigger share of business from the department store, thus increasing its sales and profits. Market knowledge gained from a close working relationships has been vital. It has also made the company look more closely at its 'production retail chain' and improve the efficiency of operations. In this respect, having the arrangement with its key supplier has given the company a greater ability to get the best possible outcomes.

Source: BIE interview

Firms with a combination of arrangements have a significant edge on firms focused solely on one linkage type. This may simply reflect the fact that they could have multiple arrangements and therefore obtain more benefits overall. Alternatively, it could imply that arrangements with key players on at least two sides of the value chain can earn above average rewards. For example, a firm working closely with both a major

customer and a vital supplier has greater control over its value chain and may be able to use this control to its advantage. The firm may also acquire several spin-offs along the way (see Box 8.6).

8.2.2 Overseas and domestic partners

Recent studies by the Australian Manufacturing Council have highlighted the importance of overseas linkages to Australian firms. In *Emerging Exporters* (AMC and McKinsey 1993) evidence was found of the increasing importance of foreign investment in the integration of emerging exporters both regionally and internationally. Links with overseas companies can also take the form of joint ventures and strategic alliances amongst others.

More recently the *Wealth of Ideas* (AMC and McKinsey 1994) provided substantial data on the benefits of overseas linkages, particularly in relation to innovation and growth.

“having access to a diverse range of market-oriented information and ideas about new products and processes and ways of doing business is critical to successful innovation... firms cannot acquire these ideas on their own. Strong linkages to the best in the business are a source of these ideas as well as a constant spur to performance improvement.”

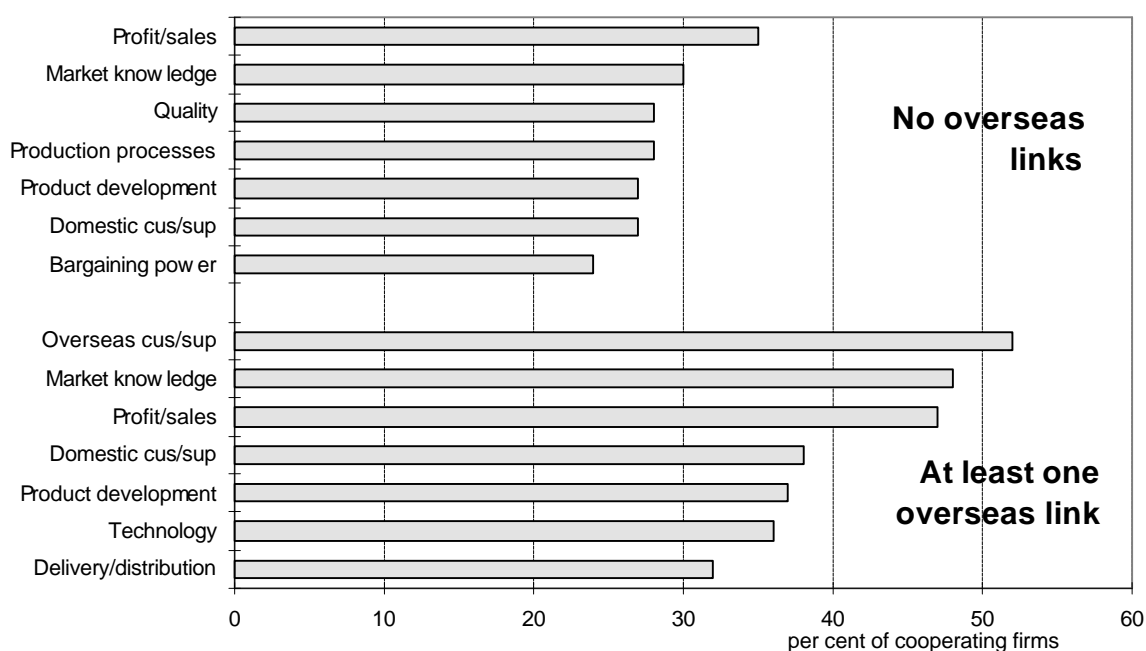
Unlike the other forms of arrangement discussed in previous sections, the BIE study was unable to consider the benefits of exclusive overseas linkages compared with exclusive domestic arrangements and arrangements with some overseas/domestic combination⁵.

What we *are* able to compare is the benefits accruing to those cooperating firms with *some* overseas linkages (that is, at least one) and those cooperating firms with *only* domestic linkages (that is, no overseas linkages at all).

The likelihood of obtaining major benefits from cooperation is much higher for firms with overseas links (Figure 8.7). Overseas-linked firms have a very high Benefit Index of 41 compared with a Benefit Index of only 28 for domestic-oriented firms.

Not unexpectedly, the most important benefit for firms with overseas arrangements is the opportunity provided by cooperation to find new customers and/or suppliers overseas. Over half of the firms benefit in this way. The proportions of overseas-linked firms benefiting from market knowledge and increased profits/sales are also well above average and way ahead of firms with only domestic arrangements.

⁵ The format of the mail survey form precluded this compartmentalisation.

Figure 8.7 Major benefits of arrangements with overseas and domestic firms

BI No overseas links 28

BI At least one overseas link 41

Source: BIE survey

Access to technology also appears to be a significant reason for firms to enter into overseas partnerships. It ranks as the sixth most important benefit (36 per cent of firms), compared with a lowly ninth rank (21 per cent) for firms with only domestic links (see Box 8.7).

Box 8.7 Accessing technology through overseas partners

Security Domain is an IT&T company employing approximately 30 people. It is a young company and one of Australia's "emerging exporters". It currently exports over half of its annual sales.

Security Domain's expertise lies in designing systems and developing software. It is a world leader in the application of smart card technology. The nature of its business has led to Security Domain forming strategic relationships with several large overseas companies. The most important of these is with French smart card manufacturer, Gemplus.

The cooperative arrangement with Gemplus provides a number of benefits to Security Domain, but one of the most important is the access it provides to Gemplus's technology. Gemplus is a leading-edge IT manufacturer, developing and adopting state-of-the-art technology. Having access to a multinational manufacturer's latest technological developments greatly assists Security Domain in developing its own products.

Source: BIE interview

Firms focused solely on the domestic market are likely to receive below average 'returns' from cooperation (the BI of 28 compares with the average BI of 32).

The high rankings for improved quality and improved production processes highlights the relatively strong emphasis placed by domestic-oriented firms on using cooperation for production efficiency and ‘getting the product right’. This contrasts with the market opportunities being sought by overseas-linked firms. Interestingly, more firms with overseas partners see their linkages as useful for finding new *domestic* customers or suppliers than the domestic-focused firms.

The key innovation indicator, product development, does not fare well with the domestic-oriented firms. However for firms with at least one overseas link, the probability of obtaining product development benefits is much improved and well above average. This could reflect the benefits of firms working closely with both their customers and suppliers (with one based overseas). In some cases, however, it will simply be the result of a greater number of linkages.

The appearance of ‘distribution’ in the overseas-linked firms’ list of benefits is notable. The 32 per cent of firms with overseas linkages benefiting from improved distribution is close to twice the amount of firms which benefit in domestic-only arrangements (18 per cent). This implies that a major function of overseas linkages is access to foreign markets.

Our findings support those of the AMC. Australian firms which form cooperative arrangements with firms overseas are much more likely to obtain major benefits from inter-firm cooperation than Australian firms which rely solely on linkages with local firms. Box 8.8 provides a further example of the wide-ranging benefits for firms with overseas linkages.

Box 8.8 The importance of overseas partners

ERG Ltd is a public company with an annual turnover of around \$100m and export sales worth around \$25m. The company manufactures high tech electronics components which are used in areas such as telecommunications, transport ticketing equipment and stored-value cards.

ERG was formed in 1984 and has been involved in cooperative arrangements since its earliest days (“cooperation is the nature of the IT game”). It has several key linkages with leading overseas companies including:

- . Nokia ERG manufactures Nokia’s GSM base station products under licence*
- . Fujitsu involved in the Onelink consortium with ERG in supplying the Melbourne Fare Collection Contract covering bus, rail and tram*
- . Goldstar ERG paging products are assembled by Goldstar in South Korea and then distributed into the Asian market.*

ERG’s overseas links have been critical to its success. The company has obtained a good mixture of benefits from working closely with its overseas partners. One of the most important benefits has been the new markets it has been able to penetrate both at home and overseas. For example, ERG sought the arrangement with Nokia to give the company a strong presence in the growing local telecommunications market, while its link with Goldstar is providing a good base for expansion in Asia.

ERG has also gained improved production processes, improved distribution of its products and access to leading edge technology from its cooperative arrangements.

Source: BIE interview

8.3 The key arrangement and partner firm characteristics

In addition to providing information on benefits for all their cooperative arrangements, we asked firms to provide a range of data about their most important or ‘key’ arrangement. We discuss the key arrangements in depth in Chapter 9. However, we look here at some of the benefits of these key arrangements. In particular we want to see how the benefits of cooperation vary with different aspects of the partners in the key arrangement – their size, location and ownership. To place the results in context, however, we first briefly examine the overall benefits associated with the key arrangement and how benefits vary with the age of the arrangement.

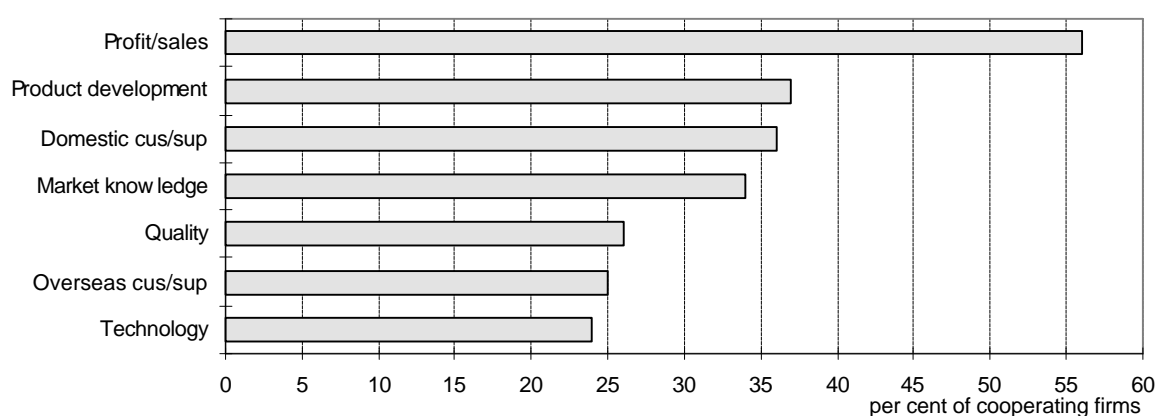
For the key arrangement, respondent firms were asked to rank the most important benefits from one to three. We rated all of these as major benefits. This differs from the method for assessing major benefits for general cooperative arrangements. In that case, we asked firms to assess the importance of all fifteen listed benefits.

Accordingly, we have to be cautious when comparing benefits from *key* arrangements with those from *all* arrangements.

8.3.1 Key arrangement overall benefits

The proportion of firms obtaining major benefits from their key arrangements are shown in Figure 8.8. The composition of the top seven major benefits differs in only one respect from the top seven major benefits of general arrangements – access to technology replaces improved production processes.

Figure 8.8 Benefits of the key arrangement



Source: BIE survey

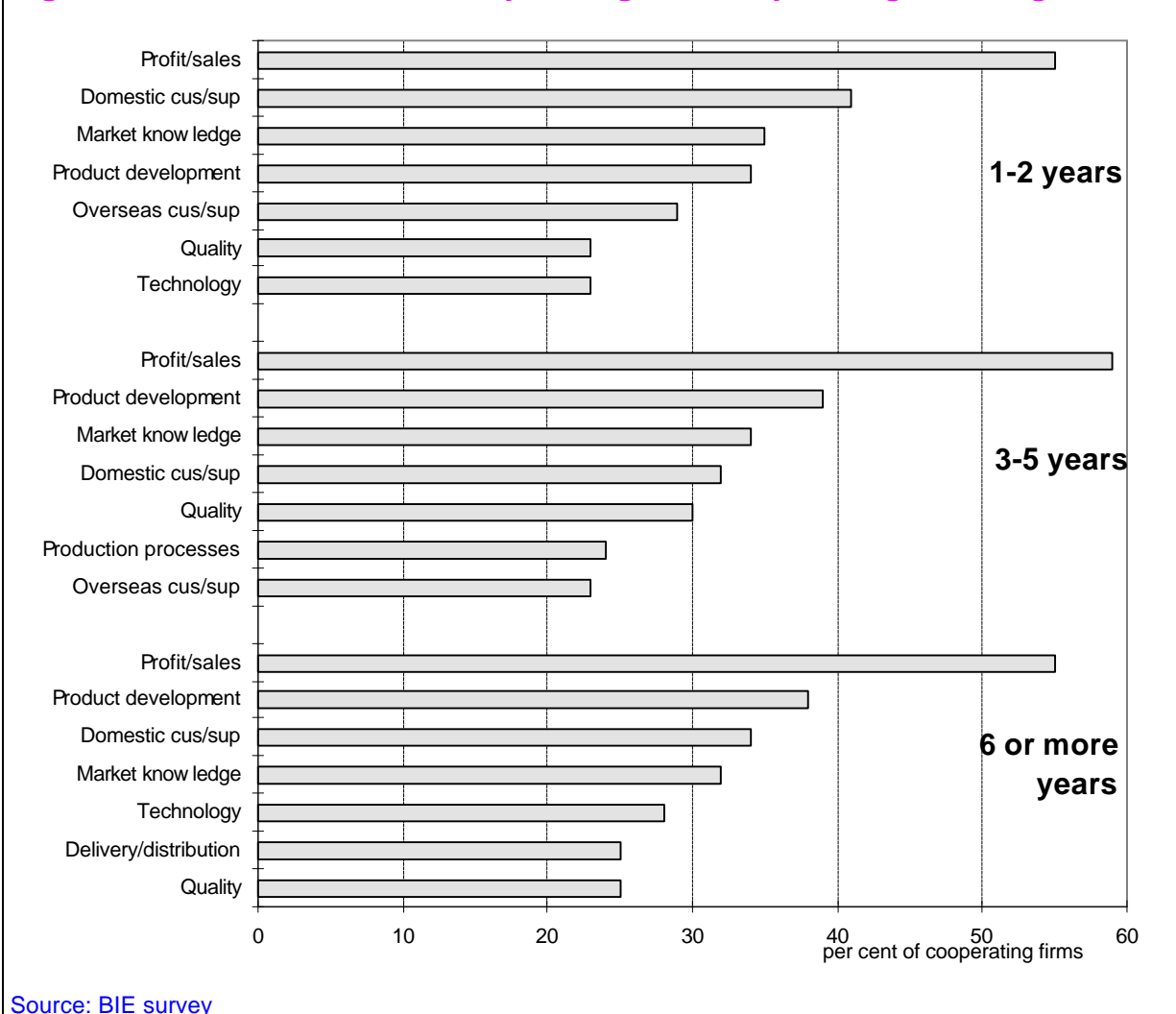
The relative importance of the top benefits are not consistent with those from linkages in general. Increased profits/sales heads the list in both cases. But then product development comes in as the second most important benefit in the key arrangement compared to its fifth ranking for general arrangements. Market knowledge and new domestic customers/suppliers are both in the top four in both cases, albeit in different places. Finally, the benefits from new overseas customers/suppliers are relatively less important for the key arrangement, while the reverse applies to improved quality.

The overall picture for the key arrangement is, then, one of similar benefits to general cooperative arrangements. There is a slightly higher emphasis on product development, quality and technology access, and a lower level of importance attached to market knowledge and new overseas partners. Improved production processes falls out of the leading benefits altogether.

8.3.2 Age of the key arrangement

Does the age of the key arrangement affect its benefits? Do benefits differ in type or degree depending on whether the firm is involved in a relatively young or old arrangement?

Figure 8.9 Benefits of the key arrangement, by arrangement age



Source: BIE survey

The average age of key cooperative business arrangements in Australia is close to six years. In Figure 8.9, the most important benefits are shown for arrangements existing two years or less, three to five years old and six years old and over.

Increased profits/sales is the most important benefit for all three categories and with approximately the same degree of importance in each case. The other top four benefits are the same in all cases, albeit in different orders, and reflect the top four overall benefits of key arrangements.

One notable difference is the higher degree of importance attached to product development and technology access in older arrangements, and to new customers or suppliers (both domestic and overseas) in the youngest arrangements.

Firms with young linkages are apparently keen to attract and secure partners with whom they can develop their supply lines or product markets. Firms in more mature relationships, having got over the initial rush for market opportunities, are seemingly more intent on using their most important relationship for innovative purposes and to access the latest technological developments. Their emphasis is on new products and new processes rather than accessing new markets.

8.3.3 Key arrangement and partner firm characteristics

The underlying question examined in this section is whether variations in the size, age, location or ownership of partners in a firm's most important cooperative business arrangement affect the benefits it receives from the arrangement.

Size of partner firms

The majority of Australian firms involved in business cooperation are firms with less than 20 employees (see Chapter 4). This reflects the general population of Australian firms.

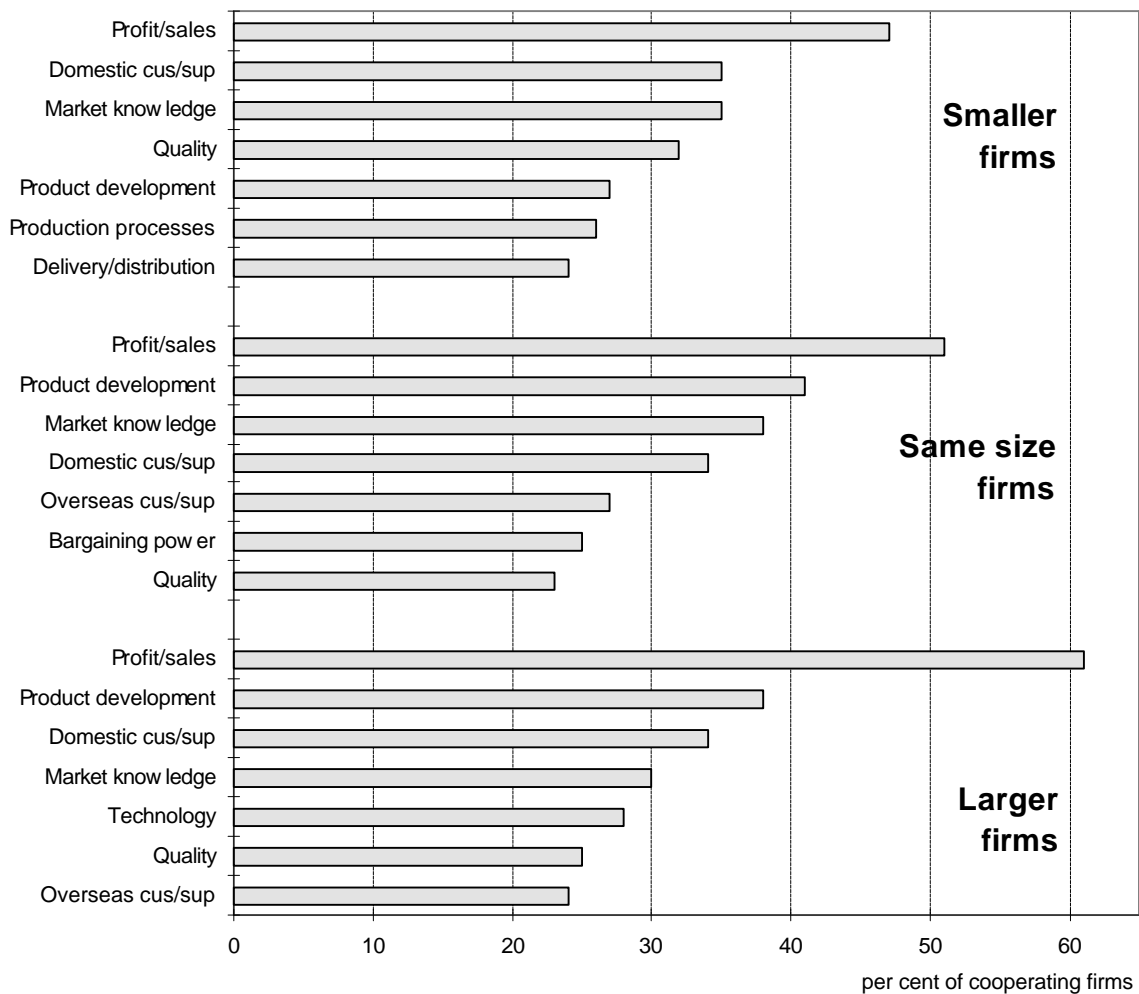
How do the benefits of cooperation vary as the size of your partner changes?

The majority of arrangements involving larger partner firms are notable for their significantly higher profitability/sales growth and the greater benefits they bring through access to technology (Figure 8.10). There is nothing else which stands out as being particularly notable although product development is more likely to be a major outcome of relationships with both larger and similar – sized firms viz-a-viz smaller firms.

Interestingly, relationships with smaller firms appear to have a very clear advantage in improving the quality of a product or service. This may be because large firms work closely on quality control with smaller suppliers.

The usual 'high profile' benefits such as new domestic partners and new overseas partners show similar results for each firm size category. However market knowledge, somewhat paradoxically, is less likely to be a major benefit for firms linked with larger firms, than firms involved with similar-sized or smaller firms.

Figure 8.10 Benefits of key arrangements, by partner's size



Source: BIE survey

Overall, the size of partner firms does not seem to make a great deal of difference to the benefits of cooperation. Dealing with larger firms may have some slight advantage for firms looking for innovation benefits.

Location of partner firms

Approximately 50 per cent of cooperating firms have partners only in the same city or town, 22 per cent have partner firms overseas, 16 per cent have them interstate and 13 per cent in the same state (but not in the same city)⁶.

The relative merits of near or far proximity attracts considerable debate. At one end of the spectrum there are the voices emphasising the critical importance of working closely with overseas customers or suppliers,

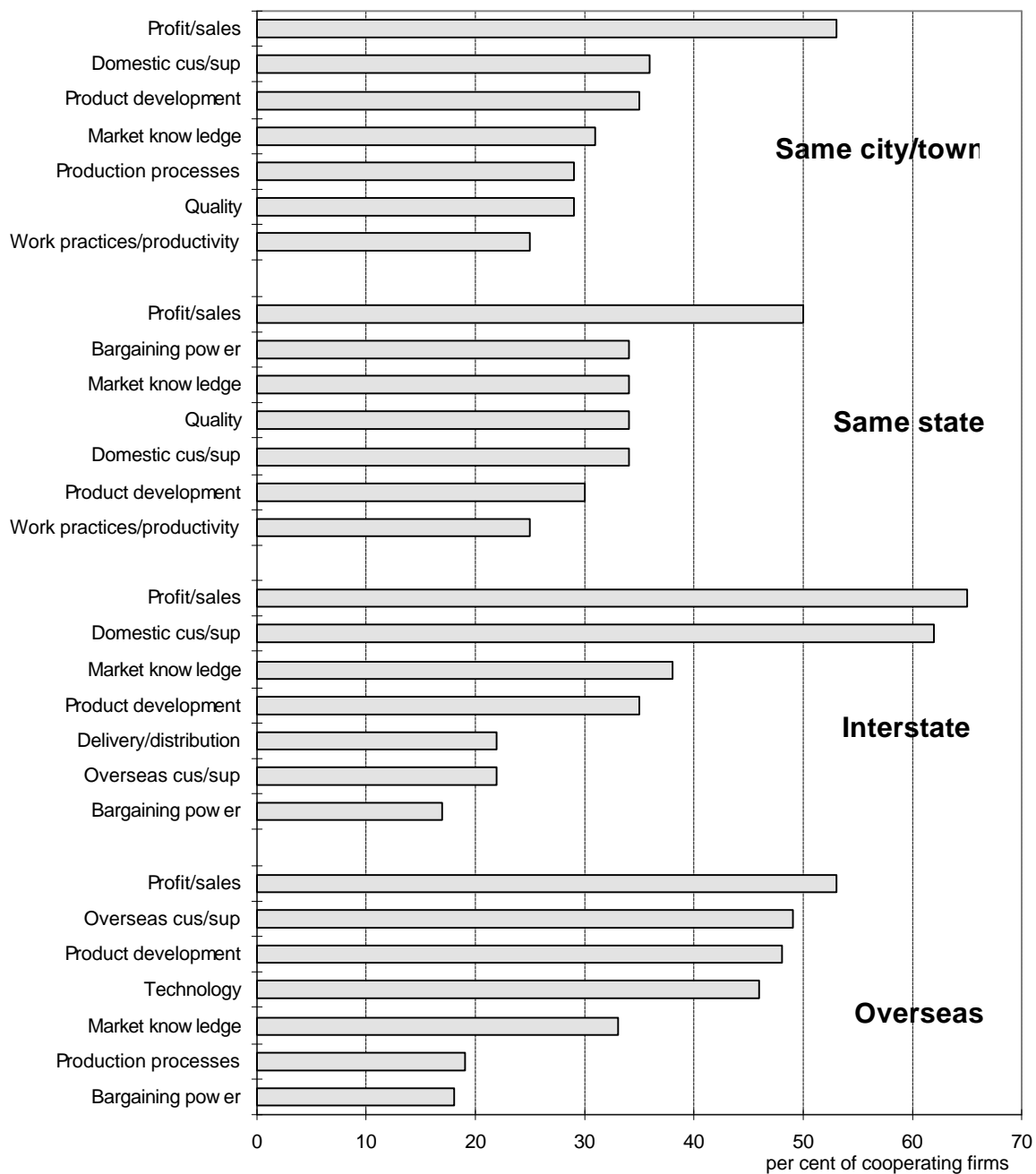
⁶ Clearly we had to look at those arrangements where firms were able to assign their partners to just one location.

while others think it vital for success that firms ‘eye ball’ each other on a regular basis, therefore entailing a close geographic location.

“Most arrangements we have are with international companies ... there are always problems of distance, but the benefits make any extra effort worthwhile.”

Figure 8.11 demonstrates that the location of partner firms does make a considerable difference to the type of benefits likely to be obtained through cooperation. Partners either overseas or interstate are the most preferable overall.

Figure 8.11 Benefits of key arrangements, by location of partner firms



Source: BIE survey

Firms with interstate partners have a heavy concentration of benefits in increased profits/sales and new domestic customers or suppliers. These are the key reasons why firms have linkages with firms interstate. Market knowledge and product development benefits are also major benefits of interstate links.

It is interesting to contrast the benefits for exclusive overseas key linkages with those of arrangements involving an overseas firm shown earlier in Figure 8.7. They show some significant differences in the ranking of benefits.

Once again, access to technology stands out as a major difference for overseas linkages. 46 per cent of firms rate this in their top three benefits. On the other hand, one clear contrast with the overseas linkage benefits shown earlier is product development. This is the third most important benefit (48 per cent) and is clearly more significant for overseas relationships than for local ones – whether interstate, same state or same city.

Firms with their key arrangement partner in the same city or state seem to have a fairly similar benefit pattern, with increased profits/sales being markedly the most important benefit. Product development does reasonably well in these arrangements. Not surprisingly, there are few firms benefiting from new overseas customers or suppliers.

Ownership of partner firms

Another test of the impact of overseas relationships is comparison of the benefits of firms linked with foreign-owned and Australian-owned companies. Foreign-owned firms account for approximately 30 per cent of the partner firms in the key cooperative arrangements. They tend to be the same as the overseas-based firms discussed in the previous section, and the results below reflect this. However, ‘foreign-owned’ and ‘overseas-based’ need not always mean one and the same⁷.

If the arrangement is with a foreign-owned firm, the probability of receiving benefits from cooperative arrangements is higher in almost all the major categories. For the seven major key arrangement benefits, only new domestic customers/suppliers and improved quality are more likely to flourish with Australian-owned firms. Product development and access to technology – two of the leading innovation benefits – are very prominent in linkages with foreign companies and are significantly stronger than in domestic-only arrangements.

The utilisation of links with foreign-owned companies to find new customers or suppliers overseas only manages to rate fifth in the list of benefits. However, the 36 per cent of cooperating firms linked with foreign firms which benefited from finding new overseas customers/suppliers, contrasts sharply with the 16 per cent of domestic-linked firms who received the same benefit. If a key objective of a firm entering into cooperative business arrangements is to expand its overseas customer or supplier base, there are clear advantages in seeking out a foreign-owned company as one of its initial partners.

The situation is reversed for firms wishing to use cooperation to find more local customers or suppliers – they are better off forming alliances with other Australian firms. Firms with Australian-owned partners are also more likely to obtain stronger benefits from cooperation in the area of quality, improved production processes and improved work practices/ productivity.

⁷ For example, an overseas-based partner may be the wholly-owned subsidiary of an Australian firm – and would not therefore be classified as a foreign-owned partner.

8.4 Modelling analysis

This chapter, and the two previous ones, have highlighted the variety of benefits firms get from different forms of cooperative business arrangements. This naturally leads to the question as to whether there are any particular firm types or forms of arrangement that are more likely to provide high levels of benefits.

We employed modelling techniques to look at this question. We modelled those firms which received five or more major/critical benefits and their arrangements. The model showed that an overseas focus is a major determinant of whether or not a firm will receive a high level of benefits from its cooperative arrangements. This was expressed in two ways. Firms with a strong reliance on exports in their turnover have a greater likelihood of *general* benefits and those firms cooperating with overseas-based partners are the most likely to gain *high* benefits.

The other key factor influencing the level of benefits received from cooperation was found to be the formalisation of arrangements. Those companies which have formal arrangements gain the highest benefits.

However, not all types of benefits are relevant or desired by all firms. For example, some firms have a very strong focus on working with their suppliers. It is interesting to look at the factors which have a role in maximising the benefits from these arrangements. By looking at firms which noted they had received major/critical suppliers benefits⁸ in three or more areas and comparing them to the other cooperating firms, it can be determined if these firms (or the arrangements they have formed) have any identifying characteristics.

The firms which gain high levels of supplier benefits differ from the other cooperating firms in that they are predominantly high technology firms. For these firms, cooperative suppliers can ensure quality products that are delivered on time and which can be altered to specification. Firms with formal arrangements are more likely to gain supplier-related benefits from their cooperative business arrangements. Through the formalisation of arrangements, suppliers are tied to the firm and all parties involved have specific and known roles to play in the relationship.

Surprisingly, firms which cited their low costs as a competitive advantage do not gain high levels of supplier benefits. One possible reason for this is that such firms tend to produce less elaborately transformed manufactures where markets are more fiercely competitive and costs are critical. Such firms are less likely to have complex inputs, which is where suppliers can make a big difference.

8.5 Summary

We have looked at the benefits associated with different forms of cooperative arrangements from two angles – the intensity of the arrangement and the nature of the cooperation partners.

There is undoubtedly a strong relationship between a high level of cooperation intensity – or the degree of involvement – and a high level of benefits. This comes across in all three measures of the intensity of cooperative arrangements. First, firms with large numbers of arrangements are likely to benefit the most. Those with five to ten arrangements, for example, benefit much more than those with only one arrangement.

⁸ Supplier benefits were determined to be comprised of improved production processes, improved management skills, improved work practices/productivity, improved training, access to technology, and access to production facilities.

Firms with only one arrangement apparently tend to favour efficiency reasons for forming linkages – improved quality and production processes are their leading benefits after increased profits/sales.

Second, firms cooperating in multi-partner, or network-type, arrangements benefit more than firms in one-to-one linkages. The former get their greatest benefit on the market-related side of the benefits coin – from new domestic customers/suppliers. Firms in networks are probably more focused on prospective benefits and have generally formed their arrangements with specific objectives in mind.

Third, the clear conclusion from a comparison of formal and informal cooperative arrangements is that firms operating on a formal basis obtain benefits far in excess of firms involved in looser arrangements. This probably reflects a variety of reasons, including greater commitment and a tendency for larger firms to formalise arrangements as a matter of course.

Intensity aside, the benefits of cooperation also vary according to who firms are cooperating with. Recent studies by the Australian Manufacturing Council (AMC) and McKinsey have emphasised the importance of customer and supplier linkages. From an overall perspective there appears to be little difference in the magnitude of benefits obtained through relationships with customers or suppliers or other firms. Some substantial differences do however occur in the nature of the benefits.

The results not unexpectedly show more of a tendency towards efficiency benefits in supplier links and market-related benefits in customer links. The two leading benefits of firms with supplier arrangements are improved quality and technology access, followed by product development. Firms with customer linkages benefit most from increased profits/sales and market knowledge, followed by new customers/suppliers (domestic and overseas). Firms in cooperative arrangements with ‘other’ firms seem to get a healthy mixture of efficiency and market benefits. Firms with a combination of arrangements (for example, a customer *and* a supplier arrangement) take the prize for benefiting the most from business cooperation. They are considerably more successful than other firms. Interestingly, they benefit more through market-related than efficiency benefits.

We also looked at the overseas or domestic focus of firms’ cooperative arrangements. A key finding is that Australian firms which form cooperative arrangements with firms overseas are much more likely to obtain major benefits from cooperation than those which rely solely on linkages with local firms.

The most important benefit for firms with overseas arrangements is the opportunity provided by cooperation to find new customers and/or suppliers overseas. The proportions of overseas-linked firms benefiting from increased profits/sales and market knowledge are also well above average and way ahead of firms with domestic linkages only. Access to technology also appears to be an important reason for firms to enter into overseas linkages.

We also examined the characteristics of partner firms in the ‘key’ arrangements. The most significant finding from this analysis, and one which lends support to the above, is that firms are much more likely to benefit from their key, or most important, cooperative arrangement when the other firm (or firms) is based overseas⁹.

Firms involved in different forms of arrangements once again noted that many of the benefits of cooperation arose unexpectedly as spin-offs. Most commonly these involved market knowledge, improved production processes, product development and improved quality.

⁹ As noted in Section 8.3.3, an overseas-based partner is usually (but not always) foreign-owned.

