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Research Report

Effects of a supply chain regulation: Survey-based results on the expected effects of the German Supply Chains Act

IW-Report, No. 8/2022

Provided in Cooperation with:

German Economic Institute (IW), Cologne

Suggested Citation: Kolev, Galina V.; Neligan, Adriana (2022) : Effects of a supply chain regulation: Survey-based results on the expected effects of the German Supply Chains Act, IW-Report, No. 8/2022, Institut der deutschen Wirtschaft (IW), Köln

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Effects of a supply chain regulation

Survey-based results on the expected effects of the German Supply Chains Act

Galina Kolev / Adriana Neligan

Köln, 23.02.2022

IW-Report 8/2022

Wirtschaftliche Untersuchungen,
Berichte und Sachverhalte

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Februar 2022

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JEL-Classification

F18 – Trade and the Environment

Q56 – Environment and Development

Q01 – Sustainable Development

Abstract

The European Commission is planning a new regulation for mandatory human rights and environmental due diligence (Due Diligence Directive) as part of the Sustainable Corporate Governance initiative. The long-awaited EU proposal is expected to have requirements that go far beyond the German Act on Due Diligence in Supply Chains (the so-called Lieferkettensorgfaltspflichtengesetz), which was regarded as a possible blueprint for a European solution. The present paper contributes to the debate on an EU due diligence regulation by presenting results of a recent survey conducted by the German Economic Institute (IW) on the potential impact of the already adopted German Act on Due Diligence in Supply Chains. It highlights both the positive effects and the undesirable side effects in the form of adjustments to value chains, product prices, etc. that German companies expect from the introduction of this German regulation. The results from the survey indicate that the introduction of a due diligence regulation is costly and should also consider the expected negative effects. The high costs of compliance are likely to motivate many companies to withdraw their activity from (mostly developing) countries with weak governance with devastating consequences for the jobs they created in the past, the production standards they brought and the capital they invested. Therefore, the new EU regulation should be carefully introduced and only target companies where evidence is available about misuse of weak production standards in third countries. It is important that the level of regulation by no means is higher than the level of regulation by the German Act on Due Diligence in Supply Chains.

The three main results from the survey are:

- **Affectedness by the new German regulation:** Almost 41 percent of the companies surveyed say they are directly or indirectly affected by the law, the share being almost as high among small enterprises and substantially higher among large and internationalized enterprises. Another 20 percent cannot yet assess whether they are affected by the law or not.
- **Plans to adapt to the new legislation:** Nearly 8 percent of the companies surveyed plan to stop supplying companies affected by the law. About 12 percent plan to leave countries with weak governance structures (primarily developing and emerging countries) because of the new regulations, and 18 percent plan to source upstream products only from countries that respect human rights and environmental protection standards. One in five companies from the survey intends to raise the prices of its own products to finance the additional costs of complying with the law. Additional staff for the upcoming monitoring is planned by only 2 percent of the companies surveyed, while 8 percent intend to hire external service providers for this purpose. Only 16 percent of the companies surveyed say they do not intend to take any further measures to adapt to the law, as they already comply with its requirements.
- **Evaluation of the new legislation:** Overall, 25 percent of the companies fully support the introduction of the law, further 24 percent rather support it. Around 27 percent of companies are convinced of a corresponding regulation at EU level. For 25 percent the same is “rather applicable”. However, only just under 12 percent of the companies surveyed feel somewhat or very well-informed by the federal government – for 46 percent of the companies surveyed the information is totally or rather insufficient. Only one in five companies believes that compliance with the law will make its products more attractive to customers. Most companies do not share the view that they will lose competitiveness due to the law. Nevertheless, more than four in ten companies expect higher costs resulting from the implementation of the law, and only 13 percent of the companies surveyed believe that their customers will be willing to bear the additional costs of implementing the law. For 16 percent of companies, it will be difficult to replace suppliers from problem countries.

1 Background

The European Commission (EC) has planned a new regulation for mandatory human rights and environmental due diligence (Due Diligence Regulation) within the Sustainable Corporate Governance initiative. Originally, the EC announced to publish the proposal for the new regulation in the course of 2021. After postponing the release date several times, the proposal will be published at the end of February 2022, thus providing new foundation for the debate about the appropriate policy measures to increase sustainability of international supply chains of EU enterprises.

Some EU companies criticize the further delay in legislation release and urge the EC to “swiftly move forward with the proposal” (5 Freunde et al., 2022). In a public letter to the EC at the beginning of February 2022, more than 100 companies and investors from the EU called for a regulation in alignment with the international standards of the UN Guiding Principles on Business and Human Rights (UNGPs) and the OECD Guidelines for Multinational Enterprises. The signatories formulate five principles regarding the companies subject to the regulation, the scope of the due diligence obligation, the accountability mechanisms etc. They call, for instance, for a widely scoped regulation covering all businesses established in the EU and/or active on the internal market regardless of their size arguing that the legislation “will be more effective the more companies it covers” (5 Freunde et al., 2022).

For other companies, the new EU regulation may bring significant disadvantages, as the debate surrounding the German Act on Due Diligence in Supply Chains (short: German Supply Chains Act) (Lieferkettensorgfaltspflichtengesetz), passed in 2021 showed (see e.g., Kolev/Neligan, 2021a). Especially in cases of long and complex supply chains, the costs of compliance with a due diligence regulation can be substantial and motivate many producers to deglobalize their supply chains. Even short supply chains of up to four stages can exhibit a high degree of complexity: If a company assembling the final product has ten direct suppliers and every direct supplier purchases its intermediate products from ten different sources, where again ten suppliers are involved, then the company under consideration has to collect information and certification from 1,110 companies.

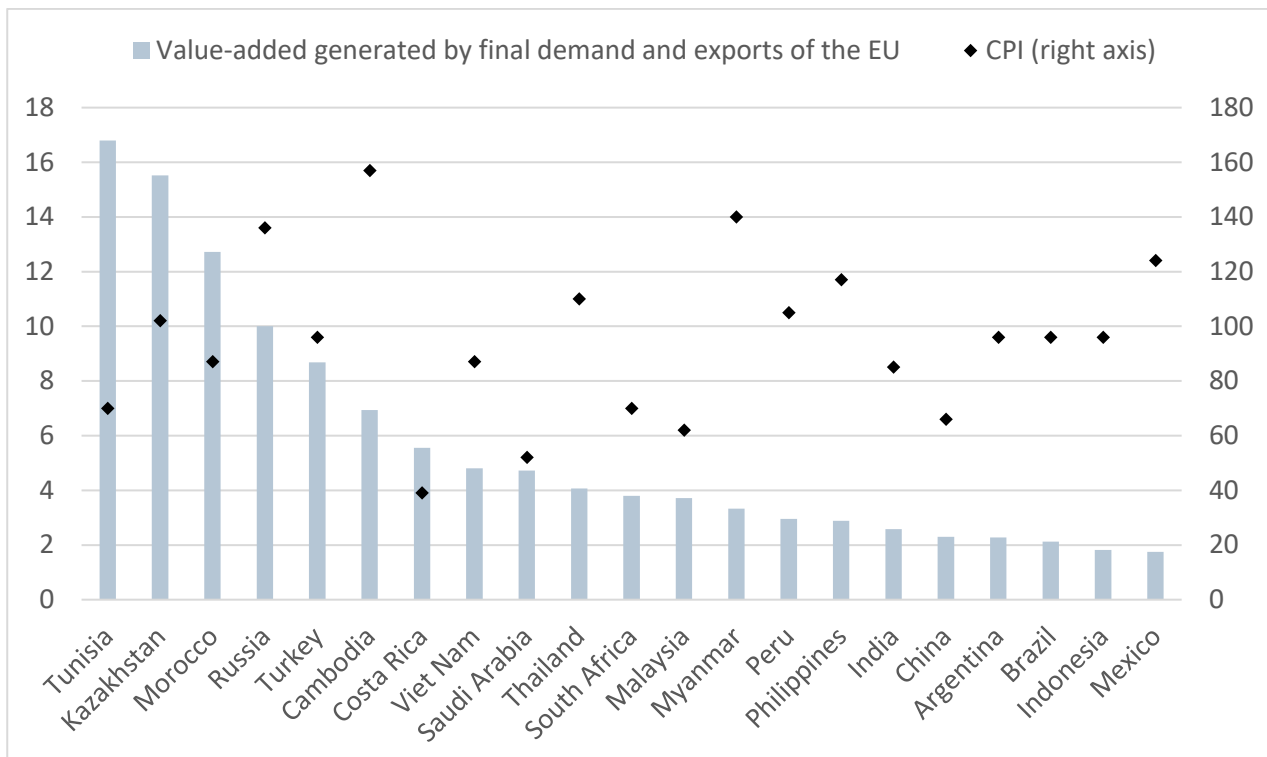
Therefore, it can be less costly to reduce the number of suppliers and choose countries where there is no or less need to overview the production processes, even if the production costs are higher. The consequences of reducing the length and complexity of international supply chains by moving production out of countries with weak governance and lower human rights and environmental standards can be mostly devastating for developing countries where progress in development relies crucially on foreign investment.

Currently, EU companies demand intermediate products from all over the world, thus providing capital and creating jobs in many both developed and developing countries. Figure 1-1 gives an overview of the role of EU companies in non-EU-non-OECD-countries as well as Turkey and Mexico. Final demand and exports of EU countries generate total value added worth 977 billion US dollars in the listed emerging economies. In Tunisia, almost 17 per cent of the value added is generated by EU demand and exports, in Kazakhstan more than 15 percent and in Morocco it is almost 13 per cent. Therefore, the EU accounts for an important part of the value added of the countries concerned. These are often countries with weak governance, less concerned with sustainability aspects, both in terms of ecological as well as social and economic dimensions. In addition to the economic interdependence of the countries with the EU, Figure 1-1 also shows their rank according to the Corruption Perception Index (CPI) developed by Transparency International. While Costa Rica, Saudi

Arabia and Brunei are characterized by low values of the index, corruption is a serious problem in most other countries, especially compared to the performance of EU countries (e.g., Germany ranks 9th). In countries such as Kazakhstan, Morocco and Russia, where more than one tenth of domestic value added finds its end use in the EU and its exports, the problem of corruption is even more widespread. Cambodia, which generates almost 7 percent of its own economic output for final demand and exports of the EU, ranks 160th in the world in terms of the prevalence of corruption.

Figure 1-1: Value-added from final demand and exports of the EU versus corruption in source countries

Value added in EU final demand and exports: 2018, percent of total value-added; Corruption Perception Index (CPI): 2021, ranking among 180 countries (right axis)



Sources: OECD, Transparency International; Kolev and Neligan, 2021b; German Economic Institute (IW)

The engagement of EU companies in other countries worldwide is often considered not only as a source of well-paid jobs and capital for investment, but also as an important means to improve standards of production regarding human and labor rights, environment and climate. Even without due diligence regulation, many companies commit themselves to sustainability goals as customer requirements have changed over time. However, there are still examples of misuse of weak human and labor rights or environmental standards in other countries as the initiative “Initiative Lieferkettengesetz” in Germany shows (Lieferkettengesetz, 2022). The case studies listed by the initiative show that there is still scope for improvement and the need for a supply chain regulation in the EU to level the playing field between regarding sustainability standards – at least within the Common Market. Furthermore, there are already a few due diligence regulations at national level, such as the so-called Loi de Vigilance in France and the Lieferkettensorgfaltspflichtengesetz. Both may improve the level of sustainability along the value-added chain of French or German enterprises, however at the price of introducing competition distortions within the Common Market. As supply chain regulations mainly target the sustainability of imported goods and services, they can be considered a trade policy measure therefore calling for a common EU solution. Yet, the planned due diligence regulation will come at a cost

for the companies and bears the risk of deglobalizing international value-added chains and therefore damaging the engagement of EU companies in developing and emerging economies. Especially small and medium-sized enterprises can experience significant disadvantages due to the high compliance costs. Although they are not directly targeted by such regulation, many of them are customers or supplier of products for large companies and will have to fulfil similar monitoring requirements. Thus, the introduction of the regulation is a tightrope walk and should be undertaken very carefully and according to the principle “As much as necessary, as little as possible”.

The present paper contributes to the discussion on an EU due diligence regulation by presenting results from a very recent survey on the potential impact of the German Supply Chains Act. It stresses both the positive effects and the undesirable side effects in terms of adjustments of the value-added chains, the product prices etc., which German companies expect from the introduction of this German regulation. The next section represents a review of already existing mandatory and voluntary due diligence regulations in the EU. Section 3 presents the results of a survey among German enterprises and considers three main aspects:

1. how German companies will be affected by the German Supply Chains Act;
2. how they plan to adjust to the new legislative;
3. how they evaluate the newly introduced law.

Finally, Section 4 contains concluding remarks on the implications of the results from the survey.

2 Due Diligence regulations

There is currently a lot of discussion about regulations at different levels to ensure compliance with due diligence requirements in global supply chains. At the same time the issue of due diligence is not new on the political agenda either (also see Kolev/Neligan, 2021a). Until recently multinational companies were expected to fulfil their due diligence obligations mainly based on voluntary measures. For guidance of this there are various international standards and frameworks available. The UN Guiding Principles on Business and Human Rights was the first global due diligence standard and requires companies to respect human rights in their global business activities (UN, 2011). Only for certain areas/sectors there has been EU legislation available. Some countries have also passed national due diligence laws such as France, the Netherlands, United Kingdom, Australia, California and most recently, in 2021, Germany.

There are also initiatives in many countries as well as votes, such as recently in Switzerland, that seek such regulation. According to the European Parliament (2021) EU member states such as Sweden, Austria, Finland, Denmark and Luxembourg are also considering such legislation. In the case of the existing United States’ Dodd-Frank Act the focus is on a specific sector of the extractive industry. Various African countries, including the Democratic Republic of Congo and Rwanda, have also passed laws requiring companies to control their supply chains in conflict minerals (EC, 2018). In other countries, the focus is concentrated on specific human rights violations, such as child labor in the Netherlands or the relatively soft regulations on forced labor in California, the United Kingdom and Australia. Only France has implemented a comprehensive due diligence law so far (Kolev/Neligan, 2021a). The following section describes the regulations for Germany, France and the so far known plans of the European Commission.

2.1 The German Act on Due Diligence in Supply Chains: Lieferkettensorgfaltspflichtengesetz

To implement the UN Guiding Principles on Business and Human Rights the German government initially relied on the voluntary commitment of companies with the NAP Action Plan adopted in December 2016. After survey evidence was presented that voluntary measures in place were insufficient and only about one out of four German enterprises fulfil or is about to fulfil the sustainability criteria set by the government, a supply chain act (Lieferkettensorgfaltspflichtengesetz) was initiated. Numerous German economists supported the initiative and issued a call for a supply chain law in early 2020 arguing that the law can help internalise negative externalities along the value chain of production (Anwander et al., 2020; Kolev/Neligan, 2021a). Others pointed out that such a regulation should be defused, since it may trigger trade diversion effects and decrease demand for products from those countries (Felbermayr, 2021; Kolev/Neligan, 2021a; Marin, 2021).

The focus of the German Supply Chain Act, which was passed in June 2021, is to minimize human rights risks and, in particular enforce the ban on forced labor, in the supply chain of German producers abroad with more than 1,000 employees from 2023 on (in the first year 2023 more than 3,000 employees) (BMZ, 2022). Environmental concerns can be relevant if human rights are being violated, e.g. in the case of polluted water or if it is a matter of human health (BMZ, 2021). According to BMZ (2021) from 2023 around 900 companies (with 3,000 employees and more) come under the law, from 2024 around 4,800 companies (with 1,000 employees and more). After this the area of application will be evaluated. It is also seen as a blueprint for a European law according to BMZ (2021).

Even though the due diligence obligation of companies is to apply to the entire supply chain, it limits the direct duty of care to the company itself and direct suppliers. Only in suspicious cases indirect suppliers must be checked. The main requirements of the law are (also see BMZ, 2021):

- The requirements that companies must meet are on the one hand dependent on the different stages within the supply chains: the company's own business operations, direct and indirect suppliers. International subsidiaries are considered as part of their company's own area of business, if controlled by them. On the other hand, the requirements are based on the kind of and extent of the business activity, the degree of influence the company has on the one committing the violation, the typically expected severity of the violation and the way in which the company has contributed to the violation.
- Firms must put the following measures in place both in their own and in their direct suppliers' business operations: Draft and adopt a policy statement on respecting human rights, implement procedures for identifying negative impacts on human rights (risk analysis), engagement in risk management (including prevention and remedial measures) to avoid potential negative impacts on human rights. In addition, they must establish a grievance mechanism and implement transparent public reporting. If there is a violation of rights, the firm must take steps immediately in its own area of business and in the case of direct suppliers they have to develop a plan on how to minimise and prevent violations in future.
- With indirect suppliers due diligence obligations only apply as warranted by the circumstances and as soon as the company learns about the potential violations. In this case the company must act immediately by conducting a risk analysis, implement a strategy to minimise and avoid the problem and firmly establish prevention measures. For indirect suppliers, industry-wide initiatives are regarded as an appropriate prevention measure.

- The Federal Office for Economics and Export Control is in charge to monitor compliance with the regulation by checking company reports, investigating any grievances made, e.g. by injured parties, and imposing sanctions if needed.
- The law does not create any new civil liability regulations. Yet civil liability on grounds outside this law remain unaffected. However, injured parties receive more rights, as people whose human rights have been violated can use the German courts to get their rights upheld, but they can also report their grievances to the Federal Office for Economics and Export Control. In addition, German trade unions and non-governmental organisations can also support injured parties from other countries in a representative way by defending their rights before a German court (BMZ, 2021).

2.2 The French Supply Chain Act: Loi de vigilance

With its Loi de Vigilance („Loi relative au devoir de vigilance des sociétés mères et des entreprises donneuses d’ordre“) France adopted a cross-sectoral approach in 2017 with a comprehensive corporate due diligence law that applies to all large French companies (with more than 5,000 employees in France or more than 10,000 employees worldwide) (EPRS, 2020). These companies must develop, implement and publish a due diligence plan enabling them to prevent serious violations of human rights, fundamental freedoms, health, safety and environmental protection and to identify corresponding risks. The plan should include a mapping of risks, regular risk assessment procedures, mitigation and prevention actions, an alert mechanism, and a monitoring mechanism. Companies that fail to comply with their due diligence obligations can be held civilly liable to fulfil their obligation (Camerlynck, 2017; GTAI, 2017; EPRS, 2020; Kolev/Neligan, 2021a). A recent assessment of the application of the law showed that while the majority of the 265 obligated firms have made progress, around a quarter of the firms does not yet apply the law effectively (Bommier et al., 2021). In addition, companies can be sued under certain conditions (Kusch/Valeske, 2018). Only in January 2020 the first lawsuit was filed based on this regulation. A dozen French cities and environmental organisations accused the mineral oil company TOTAL of not developing a sufficiently effective due diligence plan to be able to achieve the Paris Climate Agreement and more effective measures to protect the environment were needed (Koch, 2021).

2.3 The European Commission: preparation of a due diligence regulation

The EC is currently preparing a new regulation for mandatory human rights and environmental due diligence (Due Diligence Regulation) within the Sustainable Corporate Governance Initiative. After the release date has been pushed back several times the proposal is due to be published in February 2022. Like Germany the main argument for a legal solution is that according to a study carried out for the EC voluntary measures fail (EC, 2020). The long-awaited EU proposal is expected to be significantly stricter than the German regulation. In many aspects the EU proposal might have requirements that go far beyond the German Supply Chains Act. In 2021 the European Parliament already put pressure on the EC to introduce binding due diligence rules for EU companies within their value chain via a legislative initiative. The European Parliament proposed a concrete legal text that went far beyond the German regulations as it called for due diligence obligations to apply to the entire supply chain of EU companies and it not only wanted to have large companies to be held accountable and liable but also SMEs listed on the stock exchange or with a high share of risk (EP, 2020; 2021). As it is known to date, the expected proposal by the EU commission will not require SMEs (with less than 250 employees) to comply with due diligence anymore. Yet, different to the German solution the regulation shall apply to EU companies with more than 500 employees and a worldwide net turnover exceeding 150 million euros. In addition, the requirements will also apply to companies with more than 250 employees and sales

of more than 40 million euros if they generate more than half of their sales in a "risk sector". This includes the textile industry, but also the food industry and the extraction of raw materials. In addition, the scope of the EU proposal is expected to be wider as compliance with due diligence is applicable for all "established business relationships", whether direct or indirect" along their entire supply chain and is not mainly limited to the direct suppliers as in Germany. Furthermore, companies have to monitor their entire supply chain whether suppliers are violating environmental, climate and human rights. In Germany the focus lies mainly on human rights (BMZ, 2021). Furthermore, under certain circumstances companies could be held liable for violations committed by companies involved in their supply chains as the EU proposal might provide a combination of sanctions and civil liability.

3 Company survey: Expectations of the German Supply Chains Act

The German Supply Chains Act will only come into force in 2023 (see Section 2.1). As a result, it is currently too early to evaluate the effects of the planned introduction of the supply chain regulation in Germany. However, to find out more on the expected outcome of it, the IW conducted a survey among over 1,000 German enterprises. The survey covers three main subjects: the affectedness of the companies, their plans to adapt to the regulation and their evaluation of this policy measure. In the following section, the results are presented and further discussed.

3.1 Data and Methodology

The analysis of German firms is based on a unique dataset with responses from 656 producing companies – (among these 539 from the manufacturing sector) and 399 industrial service providers (logistics, business-related services) (see Table

Table 3-1). The data was specifically collected in a survey that took place in November/December 2021 as part of the 40th wave of the IW-Zukunftspanel. This is a regular and long-established online company survey which has been providing answers from over 1,000 companies to questions on structural change several times a year since 2005. The surveys are not aimed at the economy as a whole, but only at that part of it which is directly or indirectly involved in international competition. This is the industrial-services network which includes the manufacturing industry with processing, supply and disposal, construction, as well as business-related services such as wholesale, logistics, information and communications technology (ICT) and business-related services – in other words, industry and the service sectors that are closely linked to industry via intermediate inputs.

Besides more general indicators (e. g. general strategies, innovation, internationalization, digitalization) three questions were specifically asked on the possible effects (affectedness, adaptation plans and evaluation) of the German Supply Chains Act. The company survey provides original and previously unavailable facts on the situation in German firms.

Table 3-1: Survey sample

Unweighted number of firms according to size and economic sector

	Producing Sector	among which: Manufacturing Sector	Industrial Service Providers	Total
To 9 employees	136	106	141	277
10 to 49 employees	241	195	133	374
50 to 249 employees	191	151	91	282
250 and more employees	105	87	47	152
Total	673	539	412	1,085

Source: German Economic Institute (IW), own calculations based on the 40th wave of the company survey IW-Zukunftspanel

Large companies are disproportionately represented in the sample compared to the population. For this reason, a weighting based on the German statistical business register ('Unternehmensregister') is used to correct for possible size effects. Similarly, the weighting considers that certain industry groups are over-proportionally represented. The responses are weighted representatively with the number of companies. In a number-weighted extrapolation model, SMEs have a high share and determine the mean values for the overall economy to a significant extent. In addition, the responses are also weighted with the amount of turnover and the results will be mentioned if there are significant differences. In a turnover-weighted model larger companies have a stronger influence on the results.

For this paper descriptive statistics is used to explore the large data set in the context of our research question for which there is only very limited other evidence available. Looking at the differences in the mean value among different types of firms allows to extract meaningful and valuable information from the data. Different types of firms are developed by combining responses from various survey questions.

3.2 How firms are affected by the German Supply Chains Act

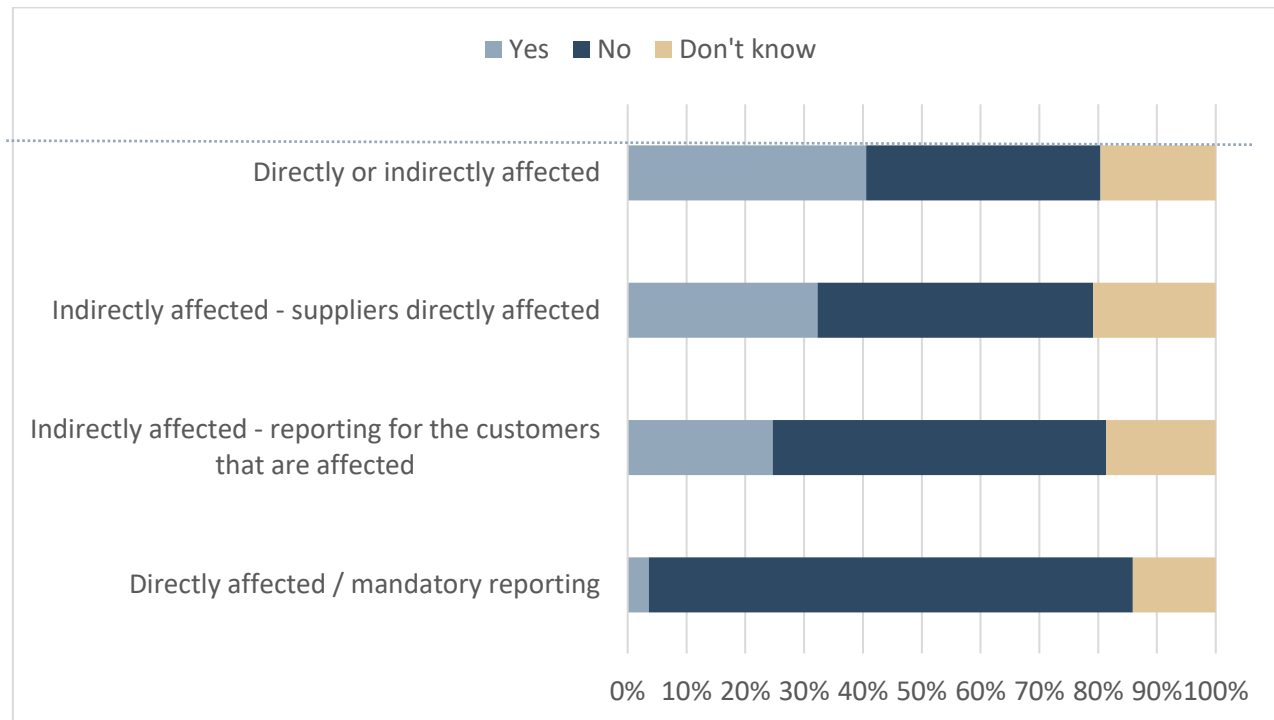
The German supply chain regulation aims at regulating due diligence mainly in large companies. From 2023 companies with 3,000 employees and more) are directly affected; from 2024 the law applies to firms with 1,000 employees and more (also see Section 2.1). Therefore, it does not surprise that only a minority of the firms are directly affected – yet a considerable share of firms is indirectly affected as the figures show. Since the results are weighted representatively with the number of companies, the average is determined by the answers of SMEs being the dominant group of companies in Germany (Figure 3-1):

- Only 4 percent of the companies surveyed stated that they are directly affected by the law.
- However, the level of overall affectedness is much higher since almost one out of four companies considers itself indirectly affected by the regulation because they have to give details to their customers on the sustainability of their products and their supply chain.

- Furthermore, one out of three companies considers itself indirectly affected because their suppliers of intermediate products are affected by the law. Overall, two fifths of all companies surveyed are directly or indirectly affected by the introduction of the law.
- A further fifth cannot give a definite answer to the question if they are or are not affected by the law.
- Only less than 40 percent are of the opinion that they are not affected by the supply chain law.

Figure 3-1: Affectedness by the German Supply Chains Act

Shares as a percentage of firms, all sectors considered



Question: Through which channels will your company be affected by the Supply Chains Act from 2023? With three response categories: yes, no, don't know. Multiple answers were possible except for "directly or indirectly affected" which was specifically calculated based on the other items.

Source: German Economic Institute (IW), own calculations based on the 40th wave of the company survey IW-Zukunftspanel, N = 1,055

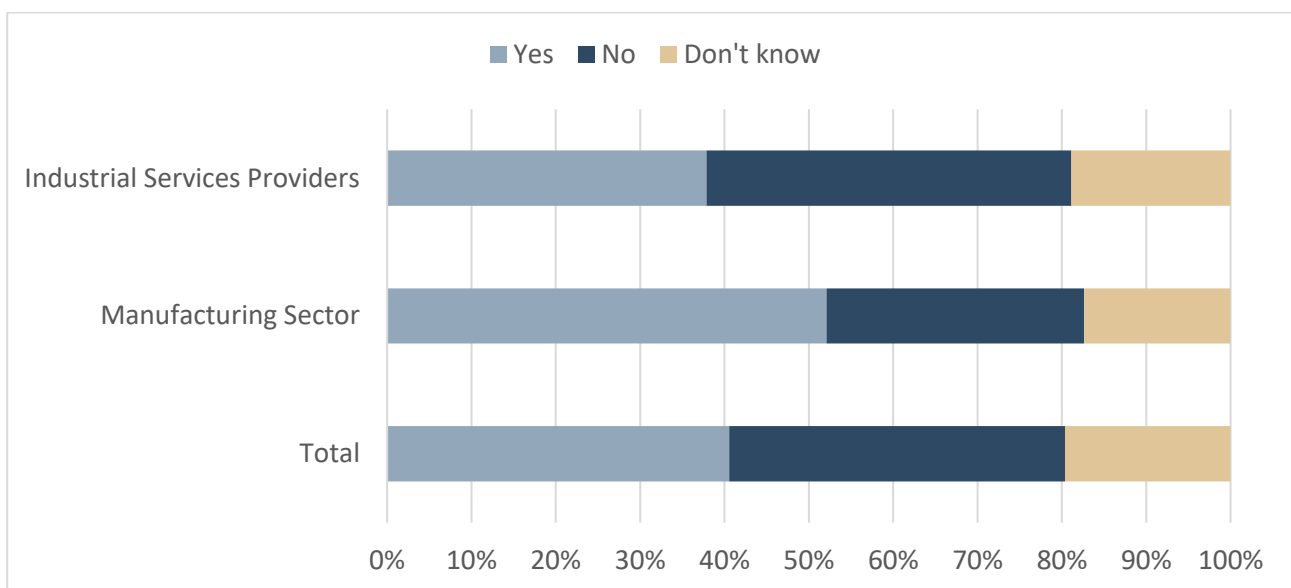
Looking at the results using a weighting based on the turnover instead of on the number of companies, the picture is a little different. Around two thirds of the firms state that they are directly or indirectly affected by the German Supply Chains Act. Directly affected are 12 percent while now almost every second firm states that they are either indirectly affected via their customers (45 percent) and/or via their suppliers (51 percent):

Sectoral view: Many firms are not affected directly but will have to comply with the German supply chain regulation indirectly either due comply with requirements of their suppliers or of their customers. Figure 3-2 represent the results for the overall affectedness for the manufacturing and the industrial services providers separately:

- The share of manufacturing companies directly or indirectly affected by the law lies at 52 percent and is significantly higher compared to the average for all sectors considered. Only 31 percent of the companies in the manufacturing sector consider themselves not affected by the supply chain law.
- Within the sector of the industrial services providers, the share of companies not affected by the law is 43 percent and thus slightly higher than the average. However, the degree of affectedness as measured by the share of those who consider themselves directly or indirectly affected by the law lies at 38 percent and is almost as high as for all sectors considered. Independently of the sector, the share of enterprises who are still unsure if they are affected or not is stable at around one fifth.

Figure 3-2: Direct and indirect affectedness by the German supply chain regulation in the different sectors

Shares as a percentage of firms in the relevant sectors



Also see Figure 3-2.

Source: German Economic Institute (IW), own calculations based on the 40th wave of the company survey IW-Zukunftspanel, N = 1,055

Company size: Contrary to the expectations, the level of affectedness is not significantly lower among small- and medium-sized enterprises. Among the enterprises with up to 250 employees, 40 percent say the law will have a direct or indirect impact and 3 percent of them consider themselves directly affected. However, in the smaller group of the enterprises with more than 250 employees, the level of affectedness is significantly higher. Here, 15 percent of the companies surveyed are directly touched by the law, 51 percent are indirectly affected by the law due to reporting obligation to their customers and 58 percent are indirectly affected due to their suppliers. Overall, almost three out of four enterprises with more than 250 employees consider themselves directly or indirectly affected by the German Lieferkettensorgfaltspflichtengesetz.

Internationalisation: Companies can operate differently in international markets. They can export goods (weakly internationalized) and/or produce locally (strongly internationalized). The degree of affectedness is especially high among enterprises that are generally internationalized be it strongly or weakly (47 respectively 54 percent). However, even companies with no internationalization may have to change their practices considering the monitoring of their supply chains. Here, more than one out of three companies consider

themselves affected by the law. Further 21 percent cannot give a definite answer to the question if they are or are not affected by the law.

3.3 How firms react to the German Supply Chains Act

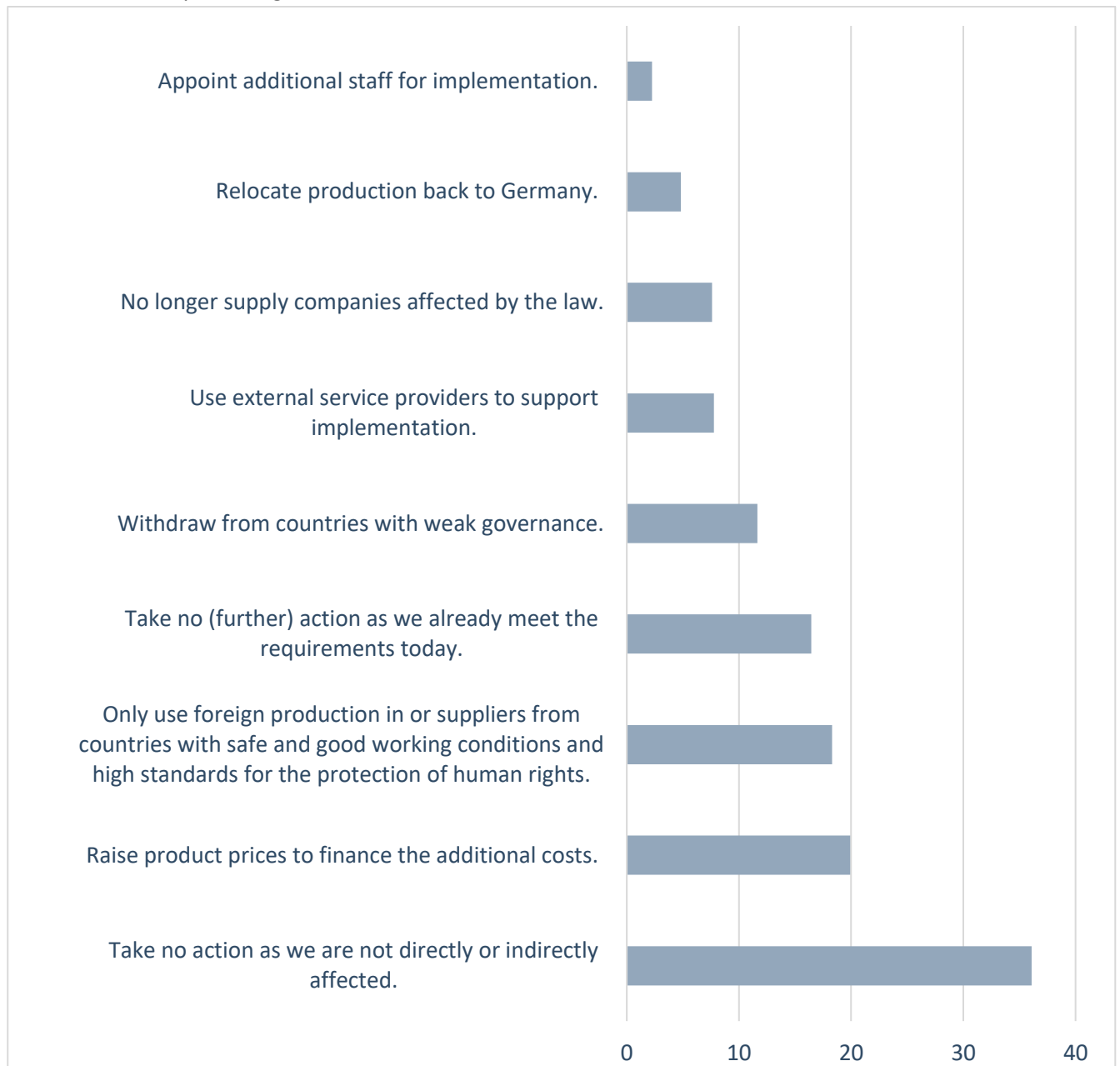
After considering the affectedness of German enterprises by the supply chain law, this subsection turns to the measures planned to adapt and adjust to the law. Only a small minority is planning to relocate the foreign production back to Germany. One in five companies intends to raise the prices of its own products to finance the additional costs of complying with the law. For a third, no measures are necessary because they are neither directly nor indirectly affected by the law. Only 16 percent of the companies do not intend to take any further measures to adapt to the law, as they already comply with its requirements (

Figure 3-3):

- Less than 5 percent of the companies plan to relocate their foreign production back to Germany due to the law. However, 8 percent plan to stop supplying companies affected by the law.
- About 12 percent intend to withdraw from countries with weak governance structures (mainly developing and emerging countries) because of the new regulation. The share is especially high among companies with foreign production where 19 percent consider this option.
- About 18 percent plan to only purchase primary products from countries with high human rights and environmental protection standards. This is particularly the case in large enterprises with more than 250 employees, where 36 percent state that they intend to withdraw from countries with weak governance. Considering the fact that about two thirds of German exports are accounted for by large enterprises, this result indicates clearly the negative impact on investment and jobs creation in developing countries with weaker governance coming from the supply chain law. The number is with 38 percent even higher for companies with foreign production structures.
- One out of five companies surveyed intends to raise the prices of their own products in order to finance the additional costs of complying with the law, the share being significantly higher among manufacturing companies (30 percent) and large companies (36 percent).
- Only 2 percent of the companies surveyed have planned additional staff for the forthcoming monitoring. Large companies consider the option of employing additional staff for the purpose of compliance with the law much more often (12 percent). About 8 percent intend to employ external service providers to do so, the share being again significantly higher among large companies (22 percent).
- Only 16 percent of the companies surveyed state that they do not plan to take any further measures to adapt to the law, as they already meet the requirements of the law.
- For 36 percent no measures are necessary because they are neither directly nor indirectly affected by the law.

Figure 3-3: Measures to adapt and adjust to the German Supply Chain Act

Shares “Yes” as a percentage of firms, all sectors considered



Question: What actions will your company take to comply with the requirements 16 of the Supply Chain Act? With three response categories: yes, no, don't know.

Source: German Economic Institute (IW), own calculations based on the 40th wave 16 of the company survey IW-Zukunftspanel, N = 943 – 964

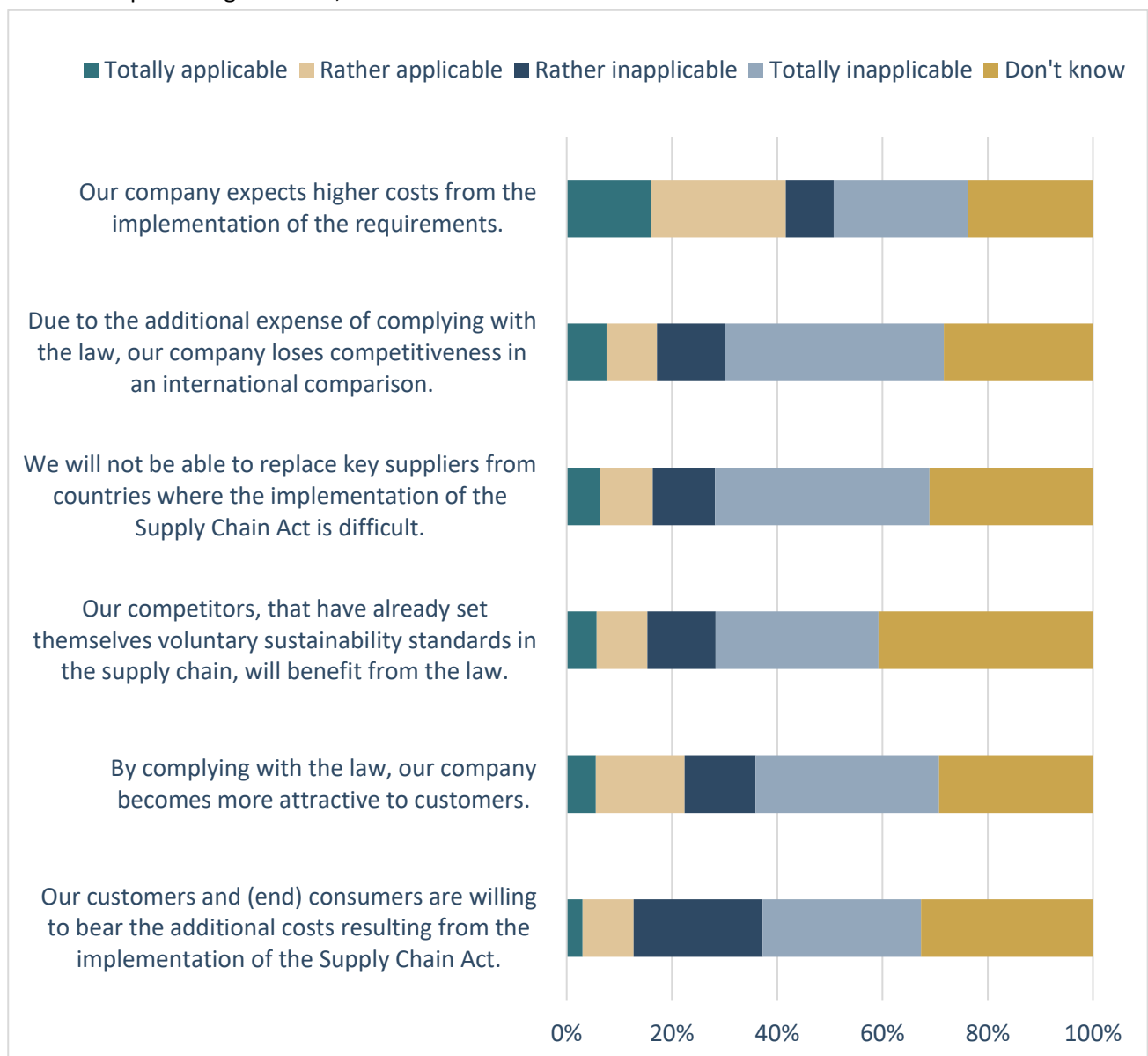
Looking at the results using a turnover-based weighting model, the results are partly the same. For the following statements the results are different: Fewer firms (20 percent) state now that they do not have to take actions as they are not directly or indirectly affected. More firms state now that they have to raise product prices to finance additional costs (29 percent) or will only use foreign production in or suppliers from countries with high human rights and environmental protection standards (35 percent).

3.4 How firms evaluate the German Supply Chains Act

The last section of the survey considers the expected impact and the overall evaluation of the supply chain law by German enterprises. Figure 3-4 represents the results regarding the expected impact due to the introduction of the supply chain law. Only 22 percent of the enterprises surveyed share the opinion that they will gain attractiveness for their customers by complying with the law at least to a certain extent (totally applicable and rather applicable combined), the share being somewhat higher among manufacturing enterprises (28 percent) and among large enterprises (35 percent) and highly internationalized companies (35 percent). Almost half of the respondents to the survey do not share this opinion.

Figure 3-4: Expected impact of the German Supply Chains Act

Shares as a percentage of firms, all sectors considered



Question: Please rate the following statements regarding the upcoming Supply Chain Act. With 4 response categories: totally applicable, rather applicable, rather inapplicable, totally inapplicable.

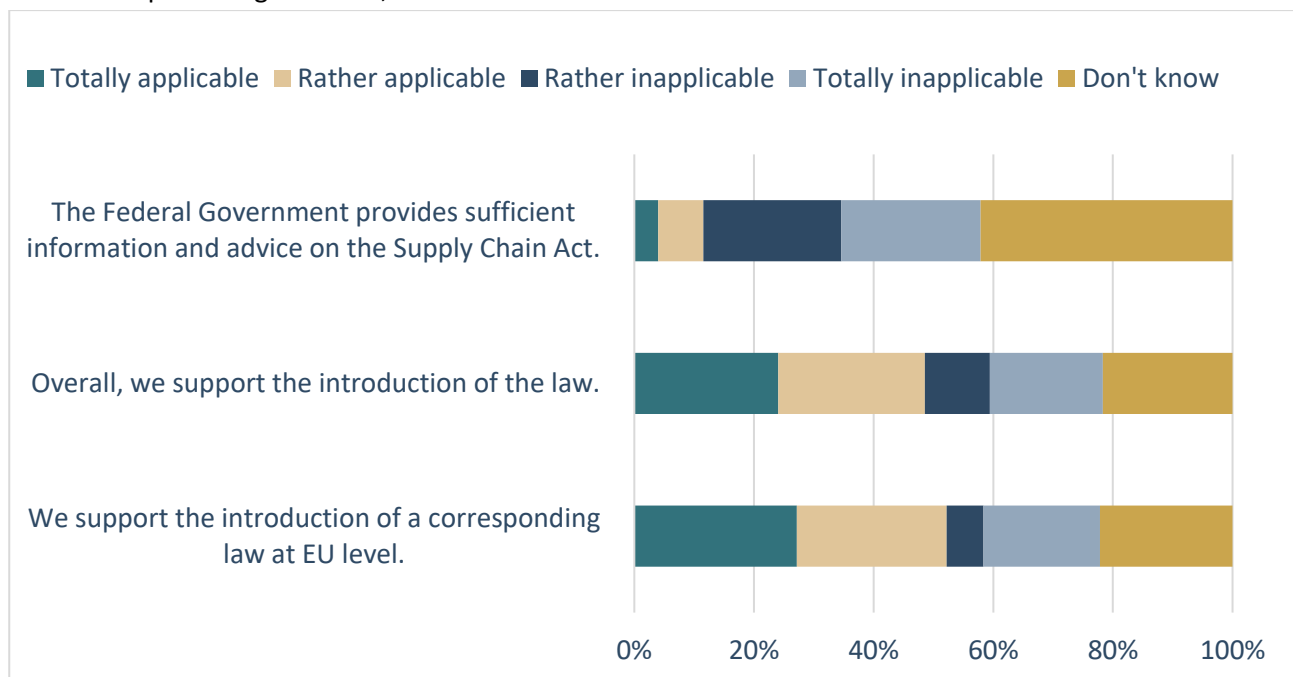
Source: German Economic Institute (IW), own calculations based on the 40th wave of the company survey IW-Zukunftspanel, N = 930

For 55 percent of the companies the introduction of the law is not expected to decrease their competitiveness on the global market. About 17 percent fear declining competitiveness. Again, the share of those who fear competitiveness disadvantages is higher among companies from manufacturing industries (28 percent), large enterprises (32 percent) and highly internationalized companies (27 percent). About 42 percent of the companies surveyed expect higher costs due to the implementation of the law. Just under 35 percent on the contrary rather or totally disagree, probably because many of them are not affected by the law. Among manufacturing companies, 56 percent fear higher costs. Among large enterprises the share is even 64 percent. Only 13 percent believe that their customers are willing to pay for the higher costs of compliance. For 16 percent of the companies it will be difficult for to replace suppliers from problem countries. This is especially the case for large enterprises with more than 250 employees (23 percent).

Overall, 25 percent of the companies fully support the introduction of the law, further 24 percent rather support it (Figure 3-5). Around 27 percent of companies are convinced of a corresponding regulation at EU level. For 25 percent the same is “rather applicable”. However, only just under 12 percent of the companies surveyed feel somewhat or very well informed by the federal government – for 46 percent of the companies surveyed the information is totally or rather insufficient.

Figure 3-5: Overall evaluation of the German Supply Chains Act

Shares as a percentage of firms, all sectors considered



Question: Please rate the following statements regarding the upcoming Supply Chain Act. With 4 response categories: totally applicable, rather applicable, rather inapplicable, totally inapplicable.

Source: German Economic Institute (IW), own calculations based on the 40th wave of the company survey IW-Zukunftspanel, N = 930

There are no significant differences between the results on the expected impact and on the evaluation of the German Supply Chains Act independently of the weighting model used. Weighting the results with the amount of turnover instead of the number of companies results in negligible differences. In most cases the shares of applicability are slightly higher if the results are weighted with the turnover of the firms.

4 Implications of due diligence regulations

The results presented in Section 3 as well as earlier evidence by Kolev and Neligan (2021b) indicate that there is a need for a careful evaluation of the expected effects of a potential due diligence regulation. Whereas some EU companies call for a comprehensive due diligence law, the costs of compliance could make significant adjustments necessary to the supply chain and production structure. Applying the results from the survey of German enterprises to the EU level, the introduction of a due diligence regulation can have a devastating impact on developing economies. If 12 percent of the companies withdraw their activities from countries with weak governance, then roughly every tenth job created by EU enterprises in those countries could be endangered. Furthermore, almost one out of five companies plans to purchase intermediate products only from countries with high human and labor rights as well as environmental standards as a result of the introduction of the German Supply Chains Act. This can motivate some governments to work harder on improving production standards in their country. However, in other countries, the overall level of human and labor rights as well as environment protection will remain unchanged and even worsen as EU companies decide to move their production out of that particular country.

The results of the survey are in line with the results of the empirical analysis by Kolev and Neligan (2021b) where a gravity equation is applied using French trade data to evaluate the trade effects of the introduction of the French due diligence regulation *Loi de Vigilance*. The results indicate that the introduction of the corporate due diligence law in France is associated with a systematically lower value of trade after taking into account the development of the standard gravity variables. Especially trade with countries with lower per capita income levels and earlier French colonies exhibit lower levels of trade with France since the introduction of the law. Thus, the results point out that supply chain regulations, while targeted at internalizing negative externalities, can also be associated with adverse effects, especially in those countries, where compliance costs are high.

The results from the survey presented in this paper confirm the hypothesis that the introduction of a due diligence regulation is costly and should consider the expected negative effects. The high costs of compliance are likely to motivate many companies to withdraw their activity from (mostly developing) countries with weak governance with devastating consequences for the jobs they created in the past, the production standards they brought and the capital they invested. Therefore, the new EU regulation should be carefully evaluated and only target companies where evidence is available about misuse of weak production standards in third countries. It is important that the level of the EU regulation is by no means higher than the level of regulation by the German Supply Chain Due Diligence Act. Yet, it is expected that the EU proposal might go far beyond the requirements in the German regulation. In principle, a European solution is welcome as national rules lead to different trade barriers and distortions of competition in the internal market. Yet, it is key to define the scope of due diligence so as to avoid negative effects for the EU economy and third countries.

To achieve the desired outcome of contributing to sustainable development goals by improving production standards in developing countries, it is therefore crucial to target the cases where lower human and labor rights as well as environmental standards are misused without unnecessary high costs of compliance for other companies. Hence, the supply chain regulation should be designed in a way which enables the internalization of potential negative externalities without creating non-tariff trade barriers. A possible approach could be based on the US example laid down in Section 207 of the Tariff Act of 1930 which prohibits the importation of goods produced by forced or indentured labor, including child labor. The main difference

between the US regulation and the plans of the EC is that the former only applies to cases where information reasonably indicates that imported merchandise may have been produced by forced labor and not to all importers of goods from abroad. This enables tackling the problem of negative externalities while leaving the positive effects of international trade untouched.

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