

MONITORING AND EVALUATION: A BRIEF GUIDE FOR INVESTMENT PROMOTION AGENCIES

Monika Sztajerowska

This note explores monitoring and evaluation (M&E) practices of the investment promotion agencies (IPAs) in OECD countries. It provides a brief overview of the main M&E practices across agencies as well as explains how impact evaluation can be conducted in the context of investment promotion.

Background and rationale

Monitoring and evaluation (M&E) is essential for ensuring that any activity attains its objectives, and does so in the most efficient way possible, in terms of quality and time. Managers and businesses routinely set objectives, identify key performance indicators (KPIs) and track performance of their employees and activities to improve effectiveness over time. Such systems also facilitate strategic decision-making when managers, thanks to the evidence gathered, can assess which activity is most effective, and decide to re-allocate staff and resources, or make product and service adjustments, accordingly. As such, M&E systems are an essential management and product development tool, allowing improvements over time.

In addition, M&E systems also help increase transparency and accountability in the use of resources, in particular of public character. Public spending is often subject to reporting requirements and parliamentary scrutiny; and, publically funded interventions tend to have in-built evaluation mechanisms in place in OECD countries (OECD, 2010, 2016). Considering that most of the investment promotion agencies (IPAs) fund their investment promotion activities nearly entirely with public resources (OECD, 2018), ensuring their effective use can be essential. In particular, in time of economic downturns or following a government change, the use of public resources, and the very existence of an agency, can be called into question, highlighting the usefulness of existence of reliable evidence on IPA's impact.¹

There is a difference between monitoring activities and evaluation. Most IPAs track their activities, and to some extent that of their competitors as well as factors that can influence their business. Yet, few actually evaluate the impact of their activities. While monitoring allows for continuous data gathering and control of everyday actions, evaluation can allow strategic insight regarding the overall effectiveness of an agency and its specific programmes and activities (Box 1). In the digital world, data and feedback collection- and monitoring are increasingly available. Yet, a jump from data-collection to meaningful impact evaluations is not trivial and requires specialised knowledge and data. As will be shown in this note, IPAs often possess, or can get access to both, and external partners, such as the OECD, stand ready to advise them.

Box 1. Monitoring and evaluation (M&E): What is it?

There is a difference between monitoring outcomes, which is a description of the factual state of affairs, and evaluation, which involves an analysis of counterfactual of what those outcomes would have been in the absence of the intervention to attribute the effect of the intervention. OECD has norms and guidelines pertaining to good practices on evaluation of government interventions going back to 1991, which are subject to regular reviews (see OECD, 2016). According to the OECD *Glossary of Key Terms in Evaluation and Results Based Management*:

- **Monitoring** is a continuing function that uses systematic *collection of data* on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds.
- **Evaluation** is the systematic and objective *assessment* of an ongoing or completed project, programme, or policy, including its design, implementation, and results. The aim is to determine the relevance and fulfilment of objectives, efficiency, effectiveness, impact, and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process.

Source: Author based on OECD (2009) www.oecd.org/dac/evaluationnetwork

Assessment of the impact of foreign direct investment (FDI) on the local economy can also be of interest to IPAs. Besides learning about the impact of their own activities, agencies may wish to know the impact of FDI and multinational enterprises (MNEs) on the local economy more generally to guide their strategic orientation. This may entail the analysis of sectoral or regional distribution of FDI, its technological- or skills content, and the impact of foreign-owned firms on job-creation, exports, tax revenue, or innovation, among others. Several different micro- and macro-level data sources, including those of the OECD, can be used for that purpose (Box 2).

Yet, the focus of this note is on evaluating the effect of IPAs' own activities, and those of other relevant bodies, on investment attraction and other outcomes (e.g. number of projects or firms that decided to invest locally and jobs created), rather than studying the broader direct and indirect impacts of FDI and foreign-owned firms in the local economy and their evolving nature over time (see a recent study of Ireland, OECD, forthcoming, for an example of an analysis of a latter type).ⁱⁱ

Box 2. Overview of Relevant OECD FDI Statistics

- **Foreign direct investment (FDI) statistics:** Several international organisations compile and disseminate FDI data, including the OECD, Eurostat, the European Central Bank, IMF, and UNCTAD. The OECD statistics (with distinction by industry, immediate and ultimate partner country and investment instrument, among others) are publically available. The OECD also sets the international guidelines for compiling FDI statistics – the most recent 4th edition of Benchmark Definition of Foreign Direct Investment (BMD4) provides operational guidelines on how FDI activity should be measured. The OECD has also linked FDI statistics with Trade in Value Added (TiVA) data to better account for foreign ownership in global value chains.
- **Structural business statistics:** The OECD collects and disseminates a wide range of statistics on businesses and business activity. The database on Activity of Multinational Enterprises (AMNE) presents detailed data on the activities of foreign affiliates in OECD countries. AMNE contains 17 variables broken down by country of origin or location (inward and outward investment) and by industrial sector for a large number of OECD countries. Overall, FDI statistics cover the financing of MNEs while the AMNE statistics cover their operations, including employment, trade, R&D expenditures, and value added.ⁱⁱⁱ
- **Private data providers:** Increasingly private data providers, such as Bureau van Dijk (BvD), Dun & Bradstreet (DNB), Thomson & Reuters, Bloomberg, the FT and others, also collecting information on the activities of firms. This data is also routinely used by IPAs and researchers to understand MNE operations (see e.g. Kalemli-Ozcan et al. (2015). New companies in this space also gather and provide data based on semantic mining as well as predictive analytics (e.g. Unomy, DiscoverOrg and RainKing). The coverage of the official FDI and business statistics as well as data offered by private data providers often differs, and may be different in different countries (see e.g. OECD, 2010 for a comparison of BvD ORBIS data and structural business statistics).

Such different sources of data can help describe the role of FDI in the economy and tend to be used by IPAs in their reports together with other data, including country-specific information on exports, innovation or regional development. In addition, the OECD is working on a project aiming to quantify the degree to which FDI contributes to attaining Sustainable Development Goals (SDGs) through the **FDI Qualities indicators**, which are to serve as a contribution to the OECD 2021 Ministerial Council Meeting (OECD, forthcoming), and a **study of Ireland** to help the national IPA assess the effect of FDI on the economy (OECD, 2019a).

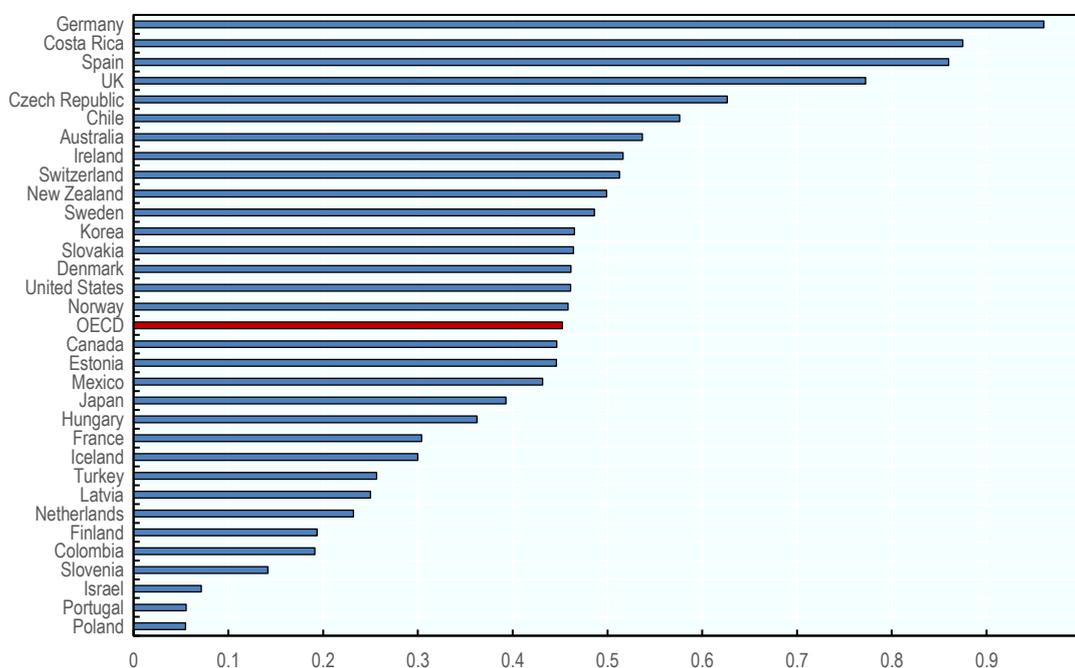
Source: OECD FDI Statistics (www.oecd.org/investment/statistics.htm), AMNE database (www.oecd.org/sti/ind/amne.htm), TiVA database (www.oecd.org/sti/ind/measuring-trade-in-value-added.htm)

Main trends across IPAs

What do IPAs currently do (or do not do) on M&E? To provide a clear snapshot answer to this question, the OECD and IDB have developed the *IPA Evaluation Index*, which captures the extent of IPA’s overall engagement in M&E activities and allows for comparisons across countries (Box 3).^{iv} The index looks at the institutional arrangement for M&E activities (i.e. presence or not of a dedicated unit), the array and sophistication of M&E techniques and tools used as well as the coverage of the agency’s customer relationship management system (CRM), among others, to capture the differences in agencies’ M&E approaches. These different aspects are described briefly one by one in in this note.

According to the *IPA Evaluation Index*, IPAs’ differ significantly in their level of engagement in M&E activities (Figure 1). For example, agencies such as Germany, Costa Rica, Spain and the UK report engaging relatively more in such activities than other IPAs. Some agencies find themselves on the other side of the spectrum (e.g. Poland and Portugal). In general, agencies that have larger budgets tend to engage more in M&E, highlighting the importance of resources (Figure 2). Yet, several small agencies – notably Costa Rica – invest heavily in M&E, partly due to the direct support of the top management that see it as a critical strategic decision-making tool. The following paragraphs compare different aspects included in the index to provide an overview of monitoring and evaluation practices across IPAs.

Figure 1 Evaluation Index of OECD IPAs*



Note: *Costa Rica and Colombia shown in the graph are completing their accession process to the OECD.

Source: Volpe Martincus and Sztajerska (2019)

Box 3. IPA Evaluation Index

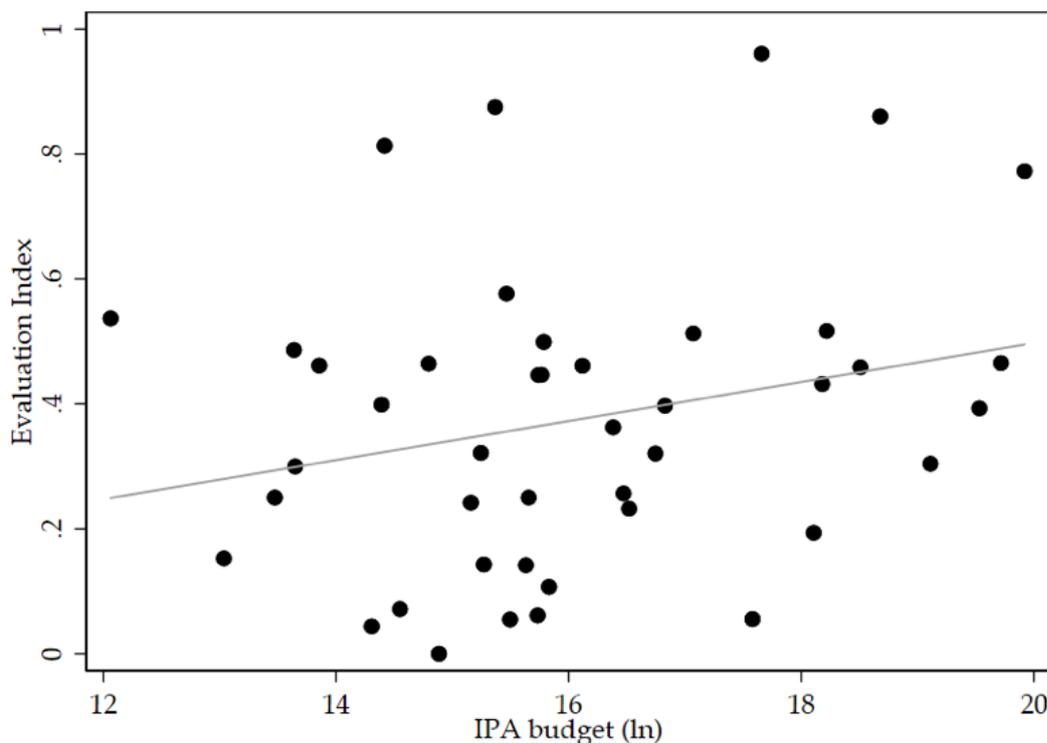
Proper evaluation of interventions requires dedicated resources, gathering comprehensive and accurate data on the specific activities involved by these interventions and the respective beneficiaries, and sound empirical approaches to establish whether and how these activities contribute to the desired outcomes, among other aspects that influence IPAs' evaluation capabilities.

The evaluation index precisely combines these aspects in the following formal way:

$$EI = (1/4) \left(EU + ECONOMETRIC + \frac{EM}{EM^{Max}} + \frac{NA^{CRM}}{NA^{Total}} \right)$$

where EU is a binary indicator that takes the value of 1 if the IPA has a dedicated evaluation unit and 0 otherwise, ECONOMETRIC is a binary indicator that takes the value of 1 if the IPA uses econometric methods for evaluation purposes and 0 otherwise, EM is the number of other evaluation methods used by the IPA, EMMax is the maximum number of other evaluation methods that could be used by the IPA (as identified in the survey), NA is the number of investment promotion activities covered by the IPA's CRM, NATotal is the number of investment promotion activities carried out by the IPA. The index thus varies from 0 (least engaged in evaluation activities) to 1 (most engaged in evaluation activities).

Figure 2 Evaluation Index and IPA Size



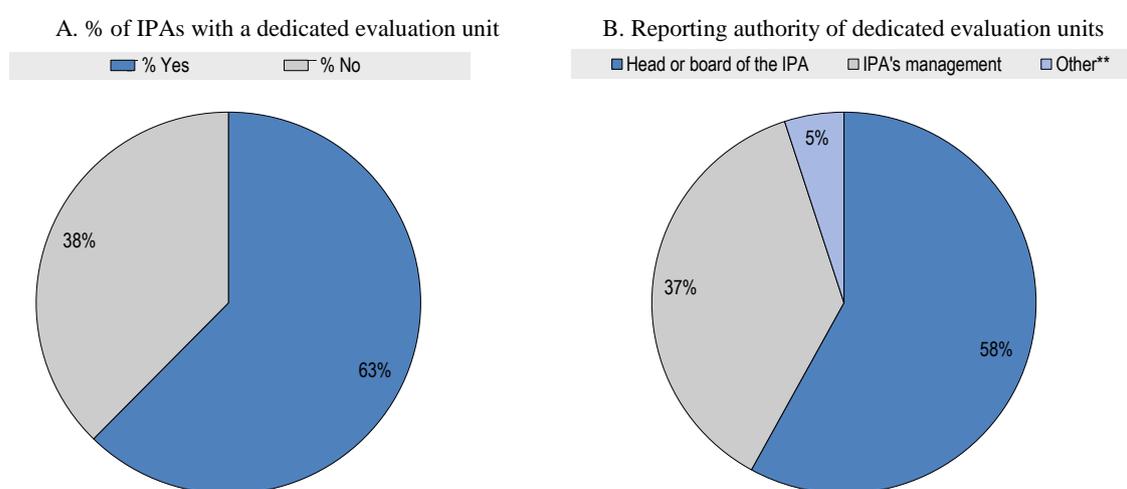
Note: The figure shows the relationship between IPA evaluation index (which is a simple average of a binary indicator capturing the existence of an evaluation unit, a binary indicator capturing the use of econometric approaches, the share of other evaluation methods, and the share of investment promotion activities covered by the IPA's CRM) and the (natural logarithm of) IPAs' size as proxied by their budget (x-axis)

Source: Volpe Martincus and Sztajerowska (2019)

General approaches to M&E

IPAs tend to have monitoring and evaluation units albeit they can be small. The majority of OECD IPAs has a dedicated evaluation unit in place that reports to the head, the board or management of the IPA (Figure 3). The size and resource endowment of such units varies greatly, however. Some IPAs devote over 10% of its FDI promotion staff, while others have no, or a negligible share of, staff available for this function (Figure 4). In addition, only little above 50% of staff have a Masters or Doctorate degree in a relevant discipline, for the few countries that reported such detailed breakdown.^v Interviews with IPA practitioners also confirm that sometimes IPA evaluation units are “lonely wolfs”.^{vi}

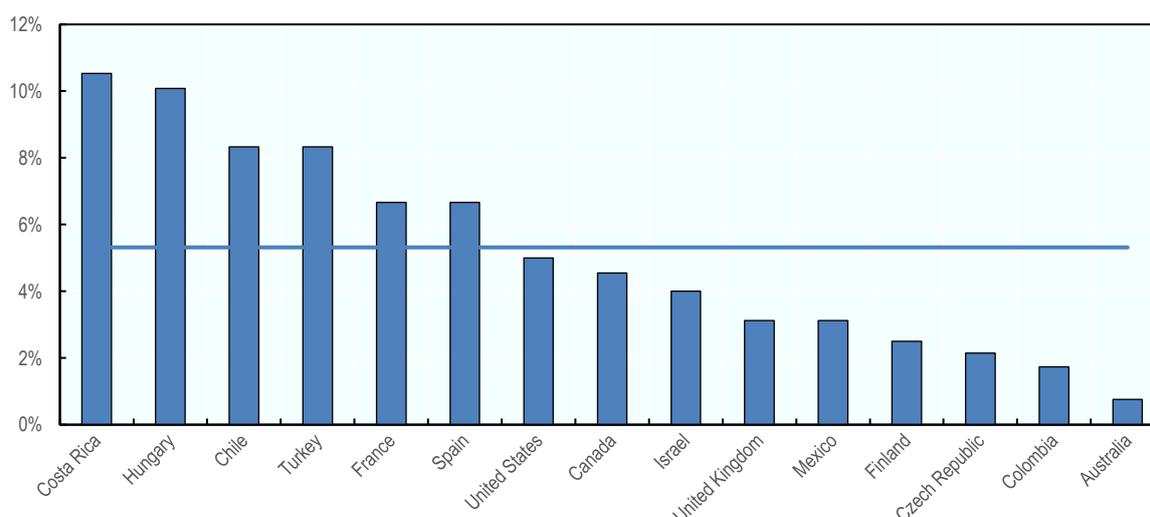
Figure 3 OECD IPAs’ evaluation organisational setting



Notes: (*) Among the 19 IPAs that have a dedicated evaluation unit and specified its nature.

Source: OECD-IDB survey of Investment Promotion Agencies (2017).

Figure 4 OECD IPAs’ share of evaluation officers in total FDI promotion staff

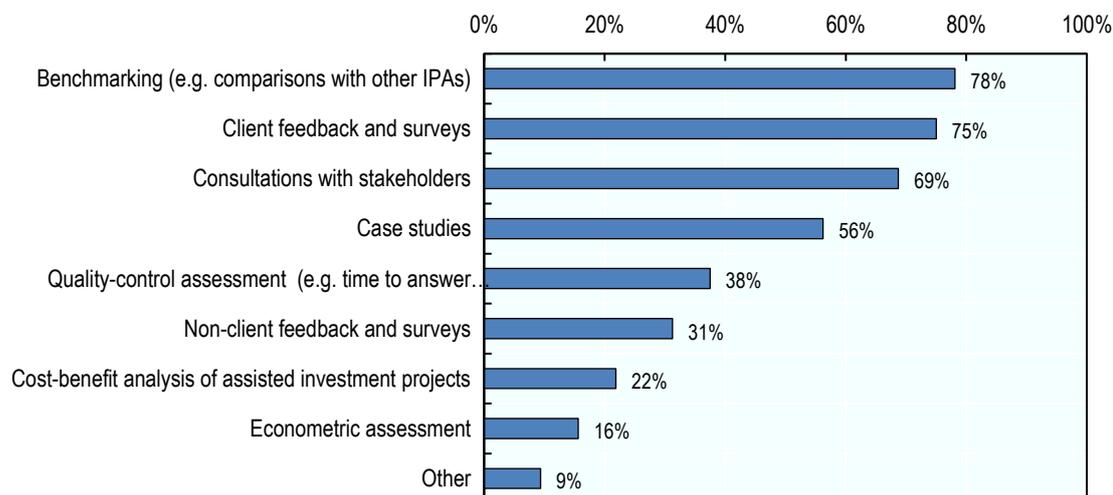


Source: OECD-IDB survey of Investment Promotion Agencies (2017).

IPAs also use different approaches to assess the effectiveness of their interventions, the least common of which are impact evaluations in the form of econometric analyses (Figure 5). Most IPAs resort to client satisfaction surveys, consultations with relevant stakeholders, benchmark exercises and case studies of companies to gauge their performance. For example, some IPAs allow firms to assess the contribution of the agency to the investment decision or rate their level of satisfaction with a specific officer that assisted them as part of KPIs. Some IPAs, also conduct non-client survey^{vii} to corroborate the adequacy of their services and analyse the cases of “lost” investment projects^{viii} to learn about competitive drivers. On top of gathering feedback from investors, surveys can also collect information on the socio-economic contribution of MNEs to the economy, such as the IDA Ireland’s *Annual Business Survey of Economic Impact* that gathers detailed information on net jobs created, payroll, investment, exports, R&D activity and other metrics, including by region.^{ix} This type of information can be used in studies on the impact of IPAs and FDI on the local economy (Box 4).

The frequency of such assessments differs across IPAs with consultations and client surveys being undertaken on an annual or more frequent basis while econometric analysis every 2-5 or 5-10 years (Figure 6). Client surveys and consultations are used on a regular basis, including to identify changing business circumstances and experience of firms. Impact evaluations, meanwhile, are often conducted to guide IPAs’ future orientation, for example, when new strategic planning or a stocktaking of IPA’s performance is prepared. Overall, these approaches provide different and complementary insights: while client survey can provide feedback and the level of satisfaction with the *current* set of services, impact evaluation can help assess if the service should be offered at all, and to whom, to maximise effectiveness of *future* actions. As will be discussed later, they can also involve different sets of challenges.^x

Figure 5 OECD IPAs’ evaluation approaches



Source: OECD-IDB survey of Investment Promotion Agencies (2017).

Box 4. The use of data to study impacts of FDI – example of Ireland

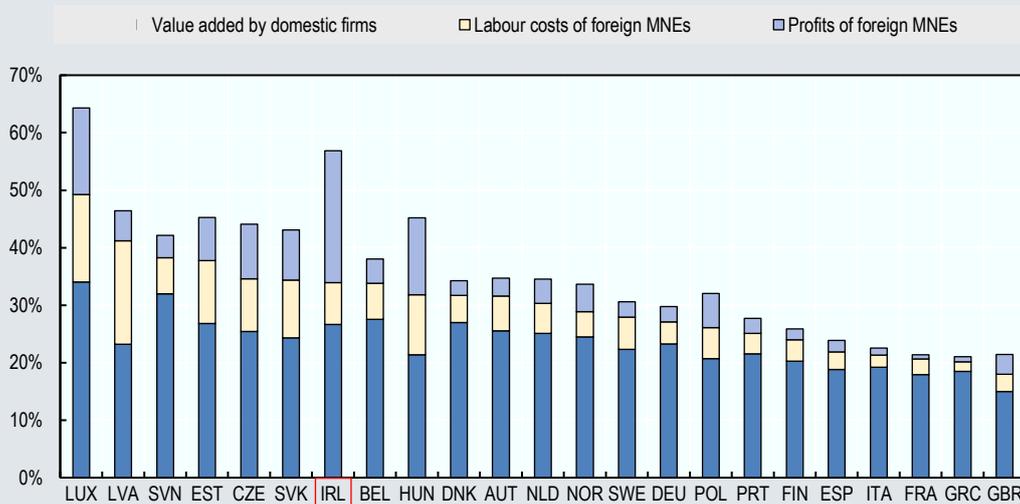
A recent OECD study of Ireland evaluated the role of foreign-owned firms as well as possible direct and indirect impacts of FDI in the local economy (OECD, forthcoming). The study provided a macro- and micro-level analysis of the role of FDI in the Irish economy in years 2006-2016 to provide insights for the development of IDA Ireland's new five-year strategy for 2020-24. Among others, it included the analysis of productivity and job dynamics of locally-established MNEs, sectoral distribution of FDI, characteristics of domestic value-chains and potential for FDI spillovers into the Irish economy.

For this purpose, the study combined a series of different data sources including those obtained directly from IDA Ireland, from other national sources, from the OECD as well as other relevant statistics. For example, the IDA Ireland's in-house data on the characteristics of its clients, notably IDA Ireland's *Annual Business Survey of Economic Impact (ABSEI)*, which includes different type of information on IDA's client firms, such as employment, payroll, sales, capital expenditures, exports, and R&D activity, was used. It was complemented with data published by the Central Statistical Office of Ireland (CSO). The study also used a suit of official statistics, including from OECD databases, e.g. OECD FDI Statistics and OECD National Accounts, and other data that have been developed to better understand the impact of MNEs on economies, including Activities of Multinational Enterprises/Foreign Affiliate Statistics (AMNE/FATS) and trade in value added (TiVA) statistics.

The combination of these various data sources, including the IPA's data and OECD statistics, allowed for an analysis that provided country-specific insights as well as comparisons to a group of economies chosen for their similar size and openness to trade and investment. For example, the OECD export statistics by ownership, based on OECD TiVA and AMNE, allow for a decomposition of country's exports in value-added terms into elements that 'stick' in the economy, i.e. exports of value added by domestic firms and wages paid to employees of foreign-owned firms, and those that can be repatriated back to home countries of the foreign parent, i.e. the profits of foreign-owned firms (Figure 4.1). As such, they allow for a more granular understanding of the role of MNEs in the local economy, including potential risks and benefits. Further information on the study and the main results can be found in OECD (forthcoming) and will be discussed at the next meeting of the OECD IPA Network.

Figure 4.1 Exports by ownership and their contribution to income as a share of GDP, 2014

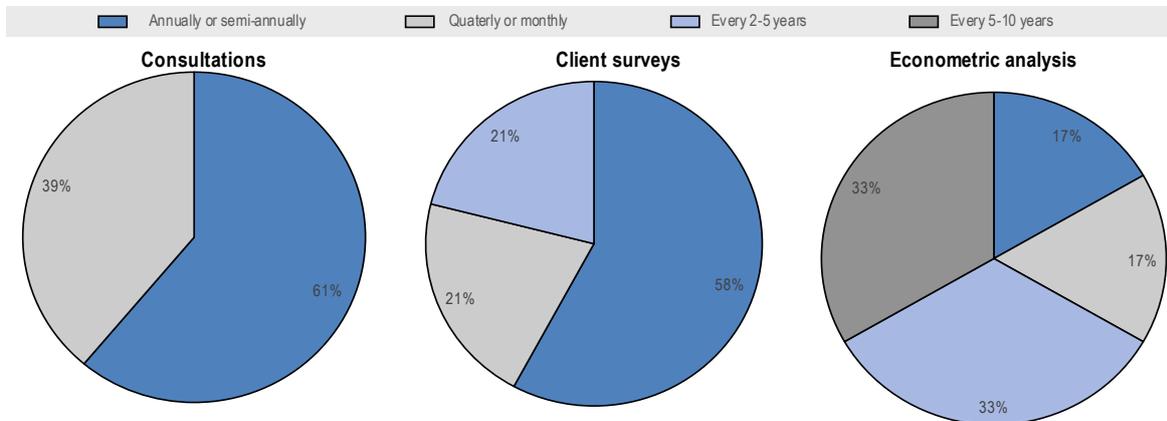
For foreign-owned firms, value added is broken down into labour compensation and profits



Source: OECD Trade in Value Added Database and OECD AMNE statistics.

Source: OECD (forthcoming)

Figure 6 OECD IPAs' evaluation approaches



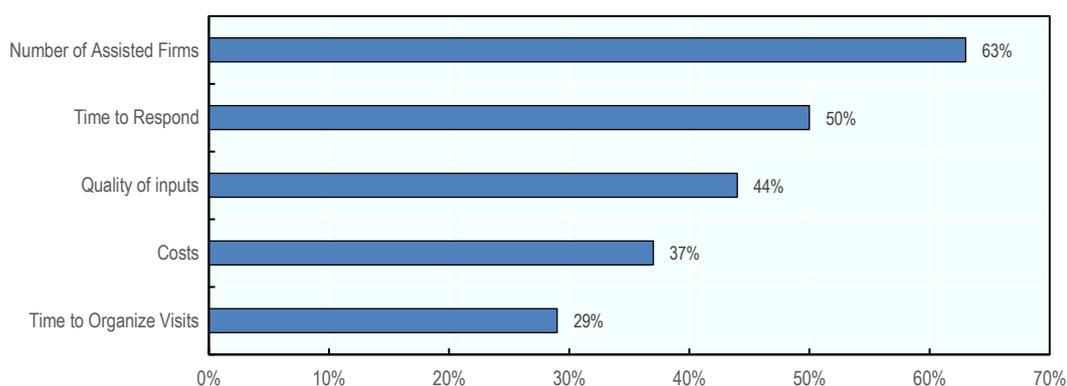
Source: OECD-IDB survey of Investment Promotion Agencies (2017).

Measurement of IPA activities

The number of firms assisted is the most common activity indicator used by OECD IPAs (Figure 7). As will be explained later, the information on IPA's *assistance*, including ideally the type of assistance (i.e. specific service) provided to firms, is critical to undertaking impact evaluations. Most OECD IPAs have access to such information, albeit how assistance is defined can vary significantly.^{xi} Time required to respond to inquiries and quality of inputs are tracked less frequently but more so than costs or the time to organise visits.

Where does the information on activities come from? It originates in IPAs' CRM systems. Most IPAs (more than 90%) have such a system, which enables them to record detailed data and monitor their activities (Figure 8). IPAs are constantly upgrading these systems: the latest version of most IPAs' CRM are only a few years old (Figure 9); and, at times, changes of CRMs raise the challenge of migrating, saving and making past data compatible with the new system. Standardising and combining investment and export promotion activities can also be difficult. In general, investment generation and investment facilitation activities tend to be best tracked (by 54% and 58% of IPAs), while image building and policy advocacy are least tracked activities in the CRM (28% and 14%, respectively) (Figure 9).^{xii}

Figure 7 Top 5: Activity Indicators



Source: OECD-IDB survey of Investment Promotion Agencies (2017).

Figure 8 OECD IPAs' use of CRM

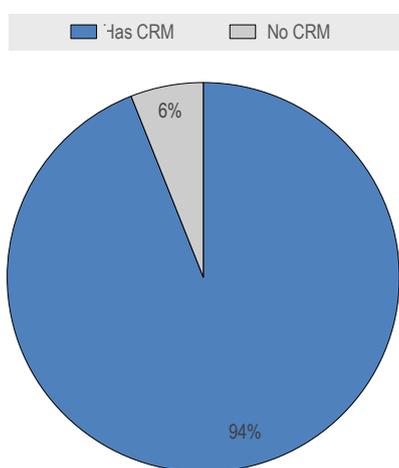
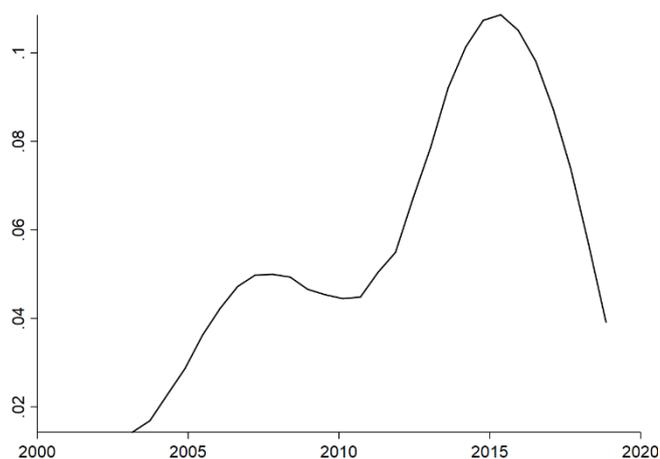


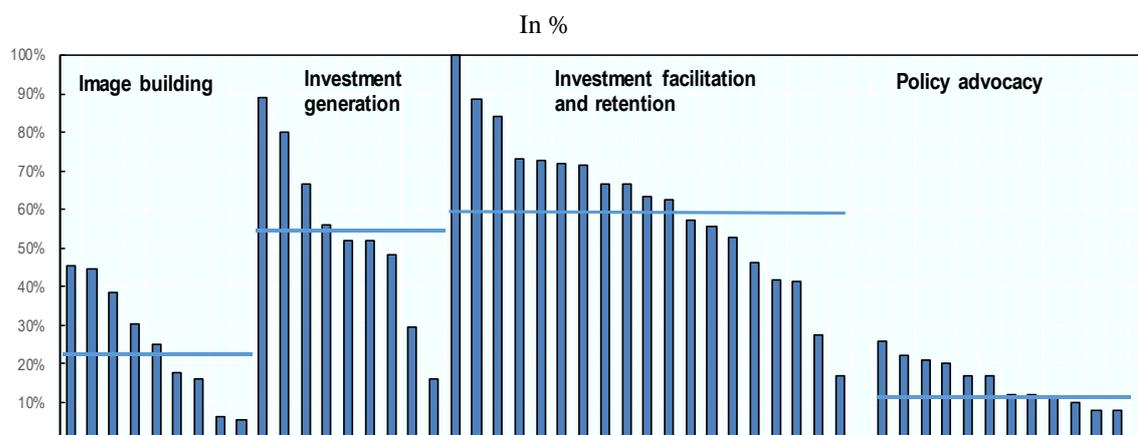
Figure 9 OECD IPAs' Current Version of CRM (Distribution of the Number of IPAs)



Note: The figure on the right shows kernel density estimates that reflect the distribution of the number of IPAs according to the year in which their most recent CRM system was adopted.

Source: OECD-IDB survey of Investment Promotion Agencies (2017).

Figure 10 Coverage of IPA Activities in CRM



Source: OECD-IDB survey of Investment Promotion Agencies (2017).

Measurement of outcomes

The number of realised investment projects, number of jobs and the total value of FDI remain the OECD IPAs’ most broadly used outcome indicators (Figure 11). The number of landed projects (or specifically “high-quality” or “priority” investment projects), and the number of jobs created (or maintained) remain one of the key outcome indicators and KPIs of IPAs. Differences in how these indicators are measured (e.g. how many years after investment jobs are expected to be created, and of what character) and how agencies verify their accuracy^{xiii} make IPAs’ KPIs rarely directly comparable.^{xiv} In addition, indicators requiring data that lie outside of the core scope of the agency, i.e. FDI attraction, are harder to come by. For example, innovation-related indicators and broader socio-economic indicators, such as wages, sustainability, or regional development are much less frequently tracked, even when they form part of the agencies’ official mandates (Figure 12).

Figure 11 Top 5: Outcome Indicators

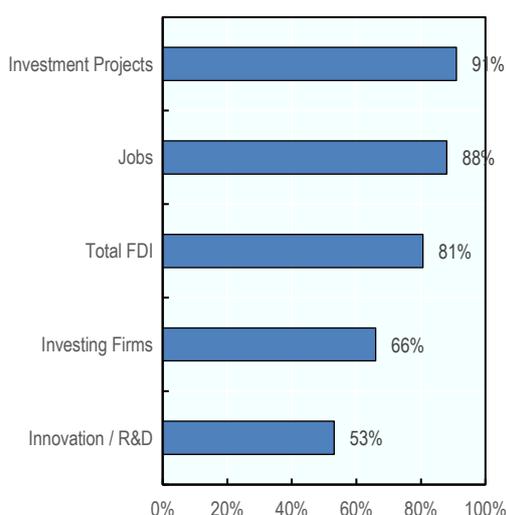
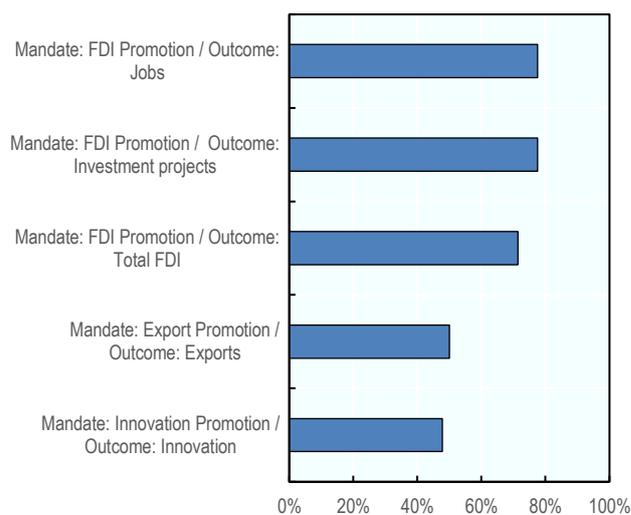


Figure 12 Top 5: Mandates and Monitoring



Source: OECD-IDB survey of Investment Promotion Agencies (2017).

Collaboration with external bodies and data providers

In many cases, lack of data relates to the difficulty of obtaining reliable data from investors directly as well as securing access to such data from other government bodies. In many cases, the National Statistical Office (NSO), the Central Bank or other specialised agency has the relevant information of interest to IPAs. The access to such data can be granted, or not, and may require formal inter-institutional arrangements as well as ability to strike partnerships. As such, nearly 60% of IPAs indicate that they collaborate with their countries' NSO, and some have engaged in joint projects (e.g. UK and Israel). The share is higher for agencies that have explicit evaluation units as well as those that are part of the government.^{xv} Hence, the IPA's legal status, political support of the government and dedicated staff can be useful in facilitating access to such partnerships and the official national data sources. In addition, many agencies also routinely use data from private data providers,^{xvi} in particular when national data are not available, or to complement such information.

Yet, such collaborations are not always easy, can be subject to legal limitations and can take time to develop. For example, in Poland, as in several other countries, by law, the Central Bank cannot release micro-level data for policymaking, regulatory, or investigative purposes, even in anonymised form; limiting the ability of an IPA to use such data. In case of the UK, DIT has worked with the Office for National Statistics to obtain structural business statistics but the matching rate between ONS and DIT's data was relatively low due to lack of a common identifier. Israel entered into a long-term project with the Central Bureau of Statistics to influence the type of data that is collected to help align it with the agency's own needs. Meanwhile, in France, the use of the company's unique identifier allows for merging with different data sources.

These practices show that IPAs are keen data users and look for new ways for evaluating their impact. Yet, being more familiar with business surveys and general statistics, IPAs engage less frequently in formal impact evaluations. While some are related to data and resource constraints, others may be driven by a perception gap, i.e. not being sure what the exercise entails and potentially assuming that it is more complex than it is. The following section aims to address this possible problem by familiarising practitioners with the main concepts and methodologies of evaluation, clarifying key terms, and illustrating the availability of required data.

Impact evaluation: a brief guide for IPA practitioners

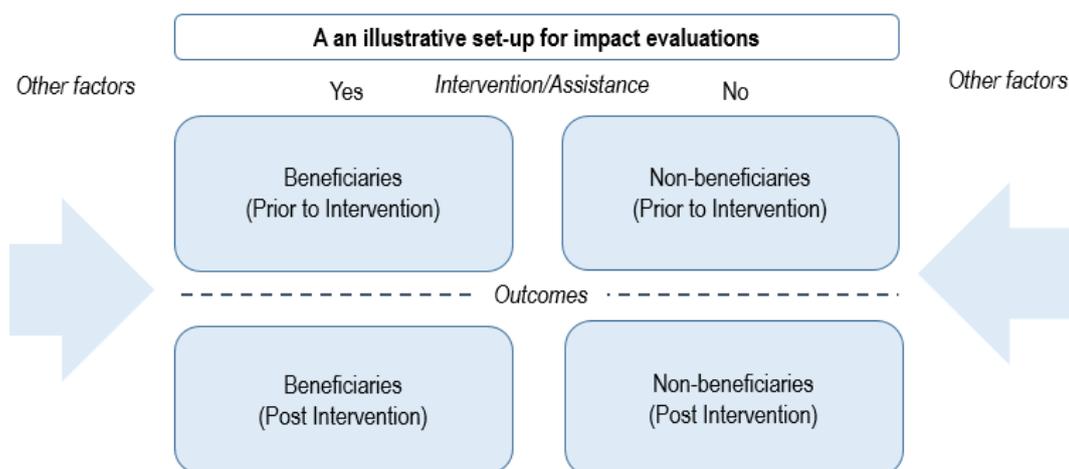
Why do we need anything else beyond what we have? First, as an IPA practitioner or expert, you may wonder: If I already know how many firms I have attracted, or how many jobs have been created by those firms, or their total value of investment or other outcomes, why do I need more? The magic answer is *attribution* of the effect of the IPA. How do we know these firms would not have invested *anyhow*? In other words, how do we know that there were no other reasons – ranging from a large internal market, government investment incentives or skilled workforce – that were the *actual driver* of the MNE decision? This is what impact evaluation –when done right – can offer, providing invaluable strategic insight.

Simple data comparisons do not allow us to control for these different factors and identify the effect of the agency in a convincing manner. The sheer count of projects,

even if contestable (i.e. involve more than one potential location), say little about the role of the agency it attracting them. Why? Because several factors can *simultaneously* influence investors' decisions, including the characteristics of the economy and the overall investment regime, complicating the identification of the role of IPA. Let's imagine that an investor has a list of two locations, your country (A) and country B. (S)he goes on a trip to country A. On the plane (s)he meets a colleague who highly recommends location A. Next morning, (s)he reads in the newspaper about the new tax incentives scheme in country A. In the afternoon, (s)he meets with the IPA that informs him/her about a special economic zone that would further lower the project's costs. Meanwhile, country B does not have such a regime, and the investor catches a cold during the trip there. If, (s)he decides to invest what made the difference? Could you conclude from the information above that it was *due to* the IPA? If this exercise is repeated for each firm assisted by the IPA, the aggregation of answers to "What made the difference?" changes significantly the conclusion about the role of the agency, and where the government should put its resources.

This is why evaluating the effect of activities – of the IPA or other bodies – requires identifying a counterfactual, i.e. determining how beneficiaries (i.e. assisted firms) would have behaved, if they had not been assisted. This is a much trickier question to answer than tracking the evolution of the total number of projects, jobs, or any other metric over time. Since both states cannot be simultaneously *observed* for the same firm (i.e. a firm cannot be both assisted and not), a statistical solution needs to be applied. Ideally, we would do an experiment: have a group of nearly identical firms considering very similar locations at the same time and assist some and not others, to see how the outcome differs. Yet, such a luxury rarely exists in real life. Fortunately, researchers can use inference and appropriate econometric techniques to evaluate past investment decisions. This involves, among others, comparing the "treatment" group, i.e. firms that obtained assistance, to a "control group", firms with similar characteristics that did not obtain assistance, to estimate the causal effect.^{xvii} This general principle applies to an impact evaluation of an intervention of any type. Figure 13 provides an illustration of this principle and Box 4 clarifies the key terms.

Figure 13 Illustrative set-up for impact evaluation.



Source: OECD

So, what does the treatment and control group mean in the IPA world? In case of IPAs, the treatment group is composed of firms that had been assisted by the IPA, regardless of whether they eventually decided to invest in the economy or not, and the control group are firms that had not been assisted by the IPA, including those that invested locally or not. Table 1 summarises this information. By applying econometric techniques that account for various observable and non-observable characteristics of these different sets of firms and comparing their outcomes, one can correctly attribute the IPA’s effect on investment decisions of firms. What do we get as a result? Thanks to this exercise, the IPA can know with more certainty that it is *because* of the agency’s assistance, or a specific programme, that the firm has invested. If the agency has information on the type of assistance, it will also be able to verify which programmes have the strongest effect and which may need to be adjusted. It is, hence, not surprising that some of the recognised IPAs, such as IDA Ireland, CINDE of Costa Rica, NZTE Investment of New Zealand or DIT of the UK undertake such impact evaluations every few years to support the definition of their strategic orientations.

To sum up, rigorous impact evaluations require application of econometric techniques that control for other factors that may affect the outcome variable of interest, such as the decision of MNE to locate in the economy, to identify the true effect of IPA’s assistance. These techniques are routinely applied in other fields, such as medicine as well as evaluation of social assistance or other forms of public intervention. Hence, establishing a causal relationship between the “treatment” and the “effect”, i.e. in our case the IPA’s assistance and the MNE’s decision to invest in the local economy, requires controlling for the influence of other factors that affect outcomes; such as the size of the internal market, MNE strategies, other government’s sectoral, regional, or other programmes and activities of other agencies, or the business cycle, among others. This is what impact evaluation does.

Table 1. Overview of groups of firms for which information is required for impact evaluation of IPAs

		Assistance	
		Yes	No
Location Decision	Yes	A. Assisted and locally established firms	B. Non-assisted by IPA locally established firms
	No	C. Assisted by IPA non-locally-established	D. Non-assisted by IPA non-locally-established

Box 5. Impact evaluation – key terms

- **Impacts:** Positive and negative, primary and secondary short-, medium- and long-term effects produced by an intervention/assistance, directly or indirectly, intended or unintended.
- **Effectiveness:** The extent to which the intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.
- **Efficiency** A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to outputs.
- **Inputs:** Financial, staff and other resources employed to undertake an activity and deliver an intervention/assistance
- **Activity:** Actions taken or work performed through which inputs are mobilized to produce specific outputs.
- **Outputs:** The products, capital goods and services, which result from an intervention; may also include changes resulting from the intervention, which are relevant to the achievement of outcomes.
- **Outcome:** The likely or achieved short-term and medium-term effects of an intervention's outputs.
- **Attribution:** The ascription of a causal link between observed (or expected to be observed) changes and a specific intervention. Note: Attribution refers to that which is to be credited for the observed changes or results achieved. It represents the extent to which observed development effects can be attributed to a specific intervention or to the performance of one or more partner taking account of other interventions, (anticipated or unanticipated) confounding factors, or external shocks.
- **Counterfactual:** The situation or condition, which hypothetically may prevail for individuals, organizations, or groups, were there no development intervention.

Source: OECD (2002-2017), *Glossary of Key Terms in Evaluation and Results Based Management*

What is needed –data requirements

All of this sounds quite tempting, but can IPAs do it, and where can they get the data from? The good news is that the key element of the puzzle is often in the hands of the IPAs, i.e. their internal information systems, or can be obtained through partnerships. Using the same matrix as above, we can illustrate which data is in the direct reach of the IPAs via their internal systems and which may require cooperation with external actors, such as other government bodies, private data providers or international organisations (Table 2). First, the data on firms assisted by the IPA, regardless of their eventual decision to invest (i.e. quadrants A and C) should be available through the IPAs' CRM systems.^{xviii} Second, the data on foreign-owned firms that were not assisted by the IPA, but are established in the local economy (i.e. quadrant B), could also come, in part or in full, from IPA's own databases. Finally, the information on firms that have neither been assisted nor established locally (i.e. quadrant D) can be procured from the private data providers (e.g. ORBIS, Dun & Bradstreet), or in cooperation with international organisations and academia that use such sources.

When limitations exist, partnerships can be a useful way to bridge gaps. The register of foreign-owned firms is frequently not available to the agencies. Even in such cases, agencies have some up with innovative ways to obtain such data by combining the agency’s own sources with the information provided by regional offices and local partners, the national statistical office, the central bank, other government agencies and private data providers. For example, France collects such data in cooperation with its regional offices since 2006 (via its *Bilan France* database). Several smaller agencies, such as Costa Rica, also collect such data and complement them with the official and private data sources.^{xix} The case of Uruguay is illustrative of how agencies can overcome domestic data limitations by entering partnerships to undertake impact evaluations.^{xx} Overall, while certain information required are in the immediate reach of the IPAs, others – with sufficient political will – can be obtained through partnerships and combining different data sources.

Table 2. Overview of groups of firms for which information is required for impact evaluation of IPAs and the source of data

		Assistance	
		Yes	No
Location Decision	Yes	A. Assisted and locally established firms (IPA’s data - CRM)	B. Non-assisted by IPA locally established firms (IPA’s data, private data providers and other government bodies)
	No	C. Assisted by IPA non-locally-established (IPA’s data - CRM)	D. Non-assisted by IPA non-locally-established (private data providers & international organisations)

In general, the longer the time period for which the data are available and the more accurate the data, the more precise the impact evaluation can be. This is because the data would provide sufficient number of observations and high-quality measurement to accurately establish the relationship between IPA’s assistance and the MNE investment decision. For example, IDA Ireland has information on its assistance recorded in CRM dating back to 1970s, and includes a significant amount of detail on the specific assistance provided, complemented via annual economic impact surveys. CINDE from Costa Rica records in its CRM detailed firm-level data on the assisted firms that have established locally or not for years 2000-2019 as well as the type of assistance provided, among others. Netherlands has about 15 years of such data, and has its regional partners integrated into the same CRM. France also has more than a decade of harmonised data with a high level of detail on the project and enterprise characteristics via its CRM and the *Bilan France* database. Austrade’s CRM system covers the information from 2012, and contains data from a previous database, dating back to 2007, therefor spanning the full period since when the agency received its investment promotion mandate (in 2008). The UK also has data on assistance available for also almost a decade with data via the CRM, and earlier periods potentially recoverable from the earlier versions of the system. In addition, besides the information on the year of assistance and realisation of the investment, ideally, additional information on the firm- and country-characteristics would also be available.^{xxi}

While these systems are often evolving, and require reflection on how to use and harmonise data, these examples show that IPAs often have adequate coverage of data in-house, in particular on the “treatment group”, i.e. assisted firms. In addition, while agencies tend not to have direct access to the register of all foreign firms established in the economy, many have built their own lists and databases, via surveys, information gathered through their investment officers at home and in foreign offices and local partners, and private data sources. Through partnerships with academia and international organisations they can also reduce costs of data collection, processing and analysis.^{xxii} Finally, many IPAs also keep track of public policies or programmes used by investors, for example assistance by regional IPAs or other partners or whether or not the company has located in special economic zone (SEZ) or under another special arrangement (e.g. Costa Rica and France), and at times record this information in their CRM. This information can also be relevant when conducting impact evaluations to attribute correctly the relative role of various actors in the overall ecosystem. Overall, the current data universe of some agencies provides a solid basis for more formal evaluations in support of IPAs’ strategic orientation.

Table 3. Overview of relevant data available in CRM

Country	Time Period for Which Data on Assistance Available in CRM	Detail on the Type of Assistance	Other Firm-Level Data (e.g. Amount of Investment)
Australia	2007-2019	Yes	Yes
Costa Rica	2000-2019	Yes	Yes
France	2006-2019*	Yes	Yes
Ireland	1970-2019	Yes	Yes
Netherlands	2004-2019	Yes	Yes
UK	2012-2019*	Yes**	Yes

Note: *Data for earlier period may be available but are located in a different system or use different methodology. **DIT is currently developing a new taxonomy of types of assistance provided.

Source: OECD

Even smaller IPAs and those located in countries with lesser levels of development have had success in securing access to the required data and undertook evaluations. The example of recent impact evaluations undertaken by the IDB in the context of Latin America and the Caribbean (LAC) shows that even the smallest agencies and those coming from much less developed economies were able to collect the data needed and undergo impact evaluations. As such, impact evaluations of over 10 IPAs from LAC are currently forthcoming (see e.g. Carballo, Marra de Artiñano and Volpe Martincus). Considering that OECD IPAs tend to be bigger than LAC IPAs and have more advanced M&E systems (see OECD, 2018, and Volpe Martincus and Sztajerowska, 2019), from a technical point of view, interested IPAs should be able to secure the necessary data to undergo similar exercises. The OECD stands ready to work with IPAs’ management and staff towards that goal.

Main challenges

The following note has aimed to provide main trends across the IPAs in the use of M&E systems, using the information from the OECD-IDB survey of IPAs as well as interviews with heads of research and evaluation units. It has also aimed to identify elements required for impact evaluation in the case of IPAs. Several key challenges emerge:

- **Defining strategic objectives and aligning the M&E system accordingly:** Before one starts to track anything, there needs to be an evidence- and consensus-based decision on what it is *worth tracking*, which is closely linked to the agency's strategy and choice of KPIs. Should the agency continue to track mainly the number of investment projects, total amount of capital investment and number of jobs, or are finer data required, e.g. on the quality, location, and character of employment or local MNE activities, to guide the IPA's work? This decision is likely to impact the overall orientation of the IPA, the design of its CRM and, more generally, its M&E system. As KPIs differ across agencies and are based on different data, direct comparisons are rarely meaningful. What matters, however, is the degree to which KPI's align with the agency's own strategy, and are systematically monitored and evaluated.
- **Aligning M&E systems with operational and evaluation objectives and teams:** Often various elements of the IPAs' M&E systems have been conceived within particular institutional settings and with a specific operational objective in mind (e.g. keeping track of contacts with firms or feeding information into the annual report). These may not automatically align with the goals of impact evaluations.^{xxiii} There is, hence, a balance to be struck between the operations- and evaluation objectives, in the CRM and more generally, and facilitating cooperation between the operations- and M&E teams.^{xxiv} Some agencies come up with original ways of balancing these objectives, and setting the right incentives. In addition, integrating export and investment promotion activities (undertaken by over 60% of OECD IPAs), and other mandates, into one CRM and M&E system can prove challenging, and requires a reflection on different types of services rendered to firms.
- **Ensuring that monitoring and evaluation serves its purpose and uses resources optimally.** Effective means of collecting, processing and verifying data is not trivial. Several agencies have highlighted intrinsic problems with conducting surveys, such as low participation rates, high time-intensity to process answers, potential selection bias, and the difficulty of verifying and, if needed, correcting data provided by investors.^{xxv} Resources are also always a constraint – for M&E activities or otherwise. As shown in OECD (2018), a median IPA has a budget for investment promotion of USD 5.21 million. As M&E activities often require more longer-term work that may appear not to be immediately linked to the bottom-line at first sight, allocating budget and staff-time may be challenging for IPAs. As a result, M&E units are often small and need to find creative ways to undertake meaningful and cost-effective monitoring and evaluation.
- **Overcoming resource constraints through creative partnerships:** Brokering successful partnerships with official data providers and other government bodies (e.g. tax office, national statistical office, the central bank) can help lower the costs of verification and allow access to a wider data infrastructure. Yet, it is far from automatic and requires skillfull internal manouvering, given the IPA's dominant legal status (60% being autonomous public agencies). In addition, in some countries, agencies may not be able to access such data due to legal restrictions and alternatives need to be considered. Creative collaborations with other actors (e.g. international organisations, private sector, academia) can allow the needed leeway, allowing for the strategic insight with reduced time and staff allocation, and potentially provide an additional clout in conversations with other authorities.

Key findings

- **There is a strong need for IPAs to demonstrate their relevance and impact.** This is required to adjust their services, ensure efficiency and allow for transparent use of resources.
- **Agencies differ significantly in the level of engagement in M&E activities** (see the *IPA Evaluation Index*). Larger agencies tend to engage more in M&E activities, on average, but notable exceptions exist.
- **IPAs generally have monitoring and evaluation units in place but they tend to be small.** Managers in those units can grapple with a high volume of requests and face staff and resource constraints.
- **There is a difference between monitoring – description of the factual state of affairs –and evaluation, which requires identification of the counterfactual and attributing the effect.** The former is done frequently by most IPAs while the latter is mostly undertaken by some leading agencies every few years (e.g. to support strategic planning).
- **The number of projects assisted is one of the key input indicators of IPAs.** This information is usually tracked in CRM albeit differences exist as to how assistance is defined across agencies. At times, type of service provided is also recorded along other data.
- **The number of projects realised and the number of jobs remain the most common output indicators.** Other indicators are less tracked, regardless of the IPA's official mandate. Monitoring of such indicators involves several challenges related to data gathering, verification, and analysis.
- **External partnerships with other actors can prove important for IPA M&E activities.** Due to their legal status (predominantly autonomous public agencies in OECD countries), IPAs may face challenges in accessing the official data. Brokering such partnerships is possible, however, with several examples available and can be facilitated by international organisations.
- **Impact evaluations are largely within the reach of agencies that possess key data.** Several agencies have immediately available data required to undertake rigorous impact evaluations of their activities, and can engage in partnerships to facilitate such exercises.

Endnotes:

¹ Several OECD IPAs have seen their budgets reduced (or have been outright shut-down – Mexican IPA) or been subject to parliamentary enquiries and political pressure and calls for more evidence on the impact.

² While FDI and AMNE statistics are closely related, methodologies and definitions differ, at times making direct comparisons difficult. For example, FDI statistics cover both control and influence (between 10% and 50% ownership) relationships while AMNE statistics cover only control relationships (>50% ownership). FDI statistics are classified according to the immediate investing country while AMNE statistics according to the ultimate investing country. Inward FDI positions by ultimate investing country should reduce the discrepancies due to differences in geographical classification.

³ For example, IDA Ireland commissioned the OECD to undertake the analysis of the role of FDI in its economy (OECD, forthcoming).

⁴ See Volpe Martincus and Sztajerowska (2019).

⁵ Data available for 6 IPAs that reported education of staff in the evaluation unit.

⁶ It is not uncommon for an evaluation unit to be a single person operating with a very limited budget.

⁷ Non-client surveys are conducted on firms that were not assisted by IPAs (they are used, for example, by Denmark, Ireland, and New Zealand).

⁸ Lost projects are those that have landed in other countries. Some IPAs also ask investors about the reasons for the decision and final destination of the project (e.g. Netherlands and Costa Rica)

⁹ The Annual Business Survey of Economic Impact is a survey of approximately 4,200 client companies of Enterprise Ireland, IDA Ireland and Údarás na Gaeltachta employing ten or more employees in Ireland that gathers information on certain aspects of firms' economic activities, such as total sales, exports, value added, payroll and total expenditure in the Irish economy. For more information, see IDA Ireland's website (www.idaireland.com). Several other IPAs gather such information through their investment officers and store them in their CRM or build specific databases.

¹⁰ e.g. Surveys may be subject to selection and sampling problems as well as have low participation rates; while econometric analysis may require access to new data and, at times, external collaborations.

¹¹ For example, some IPAs require the project to be contestable, i.e. there need to be at least few other locations considered, in order to qualify for assistance. In some cases, additional proof of meaningful involvement needs to be provided, including in form of letters or records in CRM.

¹² This raises the issue of effectively evaluating these functions, see the note on *policy advocacy*.

¹³ For example, NFIA cooperates with the Chamber of Commerce and interviews investors directly to verify outcomes 4-5 years later. DIT use company websites, private data sources, national registers (including the tax register) and local partners in the region to corroborate project characteristics at different stages of their cycle; and London and Partners apply an "optimism discount" on the figures reported by the companies, using the ratio calculated by comparing announced outcomes and those verified to be true via surveys several years later.

¹⁴ For example, IPAs differ in how they define assistance in the project, may measure jobs created and maintained or those only of certain characteristics, and at differing period of time from investment.

¹⁵ While half of government-run IPAs have indicated NSO as a partner, only 20% of autonomous public agencies have done the same.

¹⁶ e.g. ORBIS, D&B, fDi Markets, IBM Plant Location International.

¹⁷ For more information on different econometrics techniques that can be applied, see e.g. Network of Networks on Impact Evaluation (2010).

¹⁸ In addition, sometimes IPAs may also collect through their investment officers, and crosscheck with companies themselves and/or official statistics, other data on firm characteristics that could be relevant to control for in impact evaluations, such as total fixed assets or R&D spending

¹⁹ On top of information on the assisted firms and the date of investment, the Business France's database includes information on key characteristics of foreign-owned firms located in the economy, gathered by the M&E unit's staff, foreign offices and regional partners, which is available in CRM, and is complemented with private data and other sources. CINDE also gathers detailed information on firm characteristics through its CRM and complements with the data of the Central Bank and other sources.

²⁰ The national IPA, Uruguay XXI, created itself a register of all foreign-owned firms located in the economy, utilizing its own data and matching it with official tax records and D&B.

²¹ Among others, the nationality and sector of the parent firm is usually required. In addition, certain other information on the time-variant characteristics of the parent firm may need to be obtained, e.g. the total number of affiliates or the number of countries in which it operates globally. Finally, information on provision of other types of government assistance to firms (e.g. special economic zones, investment incentives) is needed to control for their effect on MNE investment decision.

²² For example, as part of impact evaluations undertaken by the several Latin American economies, the IDB has helped the participating agencies complete the universe of foreign-owned companies by using the official and private data sources (e.g. tax records, central bank's data, ORBIS).

²³ Some data may be missing, need to be harmonised or migrated from other sources. For example, when CRM systems are upgraded or changed, earlier data may not be migrated or is available in project documentation only; and historical data may be lost for other reasons (e.g. explicit legal requirements or lack of interest). If not meaningfully defined and verified, the types of services provided to firms, can also be mislabelled or not systematically recorded in the CRM, change over time, or be too detailed or too aggregate to permit meaningful long-term analysis.

²⁴ For example, short-term business objectives may reduce interest in M&E while it can provide invaluable insights long-term. The level of detail required in the CRM needs also to be assessed against the ease of providing the information by investment officers who need to fit in their schedule on top of core activities, and may require the right incentives system in place.

²⁵ E.g. some IPAs apply an "optimism discount" based on past data (e.g. NFIA and London&Partners).

References and links

- OECD (2019a), FDI Qualities Indicators: Investment for inclusive and sustainable growth, Paris.
- OECD (forthcoming), FDI Qualities and Impacts in Ireland: 2006 to 2016, OECD Publishing, Paris.
- OECD (2019b), Mapping of Investment Promotion Agencies in Mediterranean countries, www.oecd.org/investment/investment-policy/Mapping-of-Investment-Promotion-Agencies-MED.pdf.
- OECD (2018), Mapping of Investment Promotion Agencies in OECD countries, www.oecd.org/investment/investment-policy/mapping-of-investment-promotion-agencies-in-OECD-countries.pdf
- OECD (2015), Policy Framework for Investment, 2015 Edition, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264208667-en>
- OECD (2016), Evaluation Systems in Development Co-operation: 2016 Review, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264262065-en>
- OECD (2010), Evaluation in Development Agencies, Better Aid, OECD Publishing. <http://dx.doi.org/10.1787/9789264094857-en>
- OECD (2002-2009), Glossary of Key Terms in Evaluation and Results Based Management, OECD Publishing, Paris. www.oecd.org/dac/2754804.pdf
- OECD and IDB (2017), Survey of Investment Promotion Agencies.
- NONIE (2009), Impact Evaluations and Development: Nonie Guidance on Impact Evaluation, Network of Networks on Impact Evaluation, OECD, World Bank, UNEG, OCG and IOCE
- Carballo J., I. Marra de Artiñano, C. Volpe Martincus (2019), “Information Barriers and Multinational Production: What is the Impact of Investment Promotion?”, IDB Working Paper, Inter-American Development Bank, Washington D.C.
- Volpe Martincus C. and M. Sztajerowska (2019), How to Resolve the Investment Promotion Puzzle: A Mapping of Investment Promotion Agencies in LAC and OECD countries, IDB: Washington D.C. <http://dx.doi.org/10.18235/0001767>.

The note was prepared by Monika Sztajerowska under the supervision of Ana Novik, Head of the OECD Investment Division. Comments were received from Maria Borga, Alexandre de Crombrughe and Christian Volpe Martincus. The note builds on the results of the OECD-IDB Survey of IPAs conducted in 2017-18, the associated mapping reports as well as interviews conducted with monitoring and evaluation experts of selected agencies. It was prepared in the context of the OECD IPA Network's 2019 Work Plan, supported financially by Costa Rica, Israel, the Netherlands, Switzerland and the United Kingdom.

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and the arguments herein do not necessarily reflect the official views of the OECD or the governments of its member countries. This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

www.oecd.org/investment

