Early Warning System (EWS) informative flow weaknesses and opportunities – the Italian experience

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1 This presentation was prepared for the meeting. The views expressed are those of the authors and do not necessarily reflect the views of the BIS, IFC, BoP, ECB or the central banks and other institutions represented at the meeting.
Early Warning System (EWS) informative flow weaknesses and opportunities

The Italian experience

Simone Ambroselli, Chiara Orsini

Abstract

Globalisation is a new challenge for official statistics. Multinational enterprise (MNE) business decisions such as incorporation and restructuring events go beyond the EU Member State national borders, by affecting business statistics and National Accounts statistics. To cope with the new statistical needs on globalization issues, the Italian National Institute of Statistics (Istat) is committed to several projects regarding business statistics on globalization related statistics in cooperation with National Statistical Institutes and International Organisations. Particularly, since 2017 Istat has been participating in the Eurostat initiative named Early Warning System (EWS), whereby the relevant Member States of the European Statistical System (ESS) and Eurostat exchange information, by providing an early warning of MNE restructuring events.

The main objective of this paper is to explore how and to what extent the close cooperation among National Statistical Systems in the EWS framework has contributed so far to the development of harmonized statistical methodological treatment, in order to produce reliable and consistent statistics across various domains. Particularly, the paper draws the attention to the outward and inward flows of statistical information between Istat correspondent and EWS Secretariat. Moreover, the paper explores also the key elements of the system, in terms of weaknesses and strengths, EWS Istat Team has addressed so far, such as the EWS Team composition, statistical domain interrelations, statistical information reporting, and relations with other National Authorities dealing with statistics.

Finally, the paper highlights the further development and challenges towards the methodological approach on globalisation event based statistical treatment, data collection and indicators.

Keywords: Globalisation, Multinational enterprise groups (MNEs), Early Warning System (EWS), Official statistics, Practice sharing.

JEL classification: C10, C18, F23, F60, M00.

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1. **INTRODUCTION**

Large-scale economic, financial and political crises, new forms of organising economic production through global value chains has been affecting the global economies. To support national and regional policy making, National statistical Institutes and international organizations have been developing innovative statistical products while increasing geographical details and enhancing co-operation. The methodological development stated in the Framework Regulation on European business statistics (FRIBS)\(^2\) reflects the need of measuring the changing economic environment and the increasing globalisation and complexity of the business landscape through producing reliable business statistics. In this contest enhancing awareness on MNE Groups (MNEs) plays a key role in understanding globalisation issues. Multinational enterprise group economic decisions, crossing national borders, have sizeable effect on European business statistics and National Accounts. Recording and properly measuring MNE events such as incorporation, ownership of assets and economic control are the main statistical challenges for European National Statistical Institutes (NSIs).

The paper\(^3\) explores how and to what extent the Italian National Institute of Statistics (Istat) is committed to supporting international and European initiatives dealing with globalization issues (Paragraph 2). Particularly, the paper considers Istat experience in contributing to the EWS mechanism as two sides of the same coin (Paragraph 3). We draw the attention to the outward and inward flows of statistical information, by describing the methodological activities and sharing techniques developed by Istat EWS team. On the one hand, the Team identify MNE restructuring events with sizeable effects on statistical domains and on Principal European Economic Indicators (PEEIs) to trigger EWS, on the other hand, they manage the MNE cases across all different domains and they draft proposal for treatment, when EWS Istat Team receives the business case by EWS Secretariat (Paragraph 4).

By considering the comprehensive mechanism and the multidimensional process behind EWS, the paper explores also the key elements of the system, in terms of weaknesses and strengths, EWS Istat Team has addressed so far, such as Team personnel, statistical domain interrelations, statistical information reporting, relations with other National Authorities dealing with statistics, in order to facilitate harmonized statistical procedures and methods across the relevant Member States (Paragraph 5).

Moreover, in line with EWS strategy focused on ensuring a timely, consistent and coordinated communication towards National and European Statistical Entities, the paper highlights the possible further development and challenges towards the methodological approach on globalisation event statistical treatment, data collection and indicators (Paragraph 6).

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\(^3\) This Paper is the result of the joint work of Chiara Orsini and Simone Ambroselli. However, each chapter was drafted by a lead author and subsequently reviewed by the other. The lead author of the paragraphs 1, 2, 3, 4 is Chiara Orsini and the paragraphs 5, 6 were drafted by Simone Ambroselli.
2. BACKGROUND

Globalisation is a historic process of increasing interaction between national economies on a world-wide scale. While not new, interconnectedness has accelerated in recent years due to political developments and technical enablers, such as informatics and new communication tools. Globalization presents conceptual difficulties and measurement challenges in providing data for policy purposes. As shown by Sturgeon in his Report to Eurostat (2013) on Global Value Chain and Globalization, some statistics are related to the globalization phenomenon by their nature such as, International Trade of goods and services, Foreign Affiliates (FATS) and Foreign Direct Investments (FDI) statistics and International Sourcing (IS). In addition, considering the micro data level, the EuroGroup Register (EGR) and the European System of Business Registers (ESBRs) play an undeniable role in analysing global economic dynamics.

The impact of globalization and the measurement of the activities of multinational enterprises\(^4\) (MNEs) in statistics represents one of the largest “measurement” challenges facing producers of economic statistics today. It is indisputable that statisticians need to understand MNE activities to produce relevant economic statistics. Sharing data on the structures and activities of MNEs nationally and internationally among producers of official statistics has become an imperative to guarantee the high quality of official statistics. When an enterprise re-organizes its own business activities at the International level, National Statistical compilers measure only part of their global activities. The treatment of local entities in different Countries as individual enterprise can hide the real relationship between units in MNEs. Identifying the real dimensions of the enterprises and understanding the structural market effects are challenging for National Statistical Institutes. When approaching to MNE, NSIs need to analyse the events beyond national borders in order to ensure consistency in statistical treatment.

Following the approach of the Guidelines on Integrated Economic statistics\(^5\), which underlines the importance of creating a consistent framework for measuring an increasingly interconnected global economy, the Italian National Institute of Statistics is strive for excellence with regard to increasing statistical information and providing high quality products. To meet the new statistical needs on globalization, Istat is committed to several International and European projects. Particularly, Istat is member of the European System of Interoperable Statistical Business Registers (ESBRs) which aims to address the challenges of measuring globalization by harmonizing statistical methods and techniques among National Statistical Institutes. By consolidating the Eurogroups Register (EGR) 2.0 and profiling developments, ESBRs contributes to increase statistical quality on globalisation and interoperability while reducing duplications and errors. Moreover, to understand MNE global business activities, their structures and their international ownership chains, Istat has been working on Global/European Profiling activities, which analyses the economic and operational structure of Multinational Groups irrespective of geographical borders. At the National level, a Large Cases Unit (LCU), in charge to analyse statistical

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\(^4\) In this Guide multinational enterprise is understood as a group of (two or more) enterprises producing goods or delivering services in more than one country under a management headquarters in one (or rarely in more than one) country.

data across all different domains referred to a Multinational Enterprise Group was established. It is also worth mentioning is the International Sourcing project which aims to increase the efficiency and effectiveness of statistical production processes and to provide statistics on existing functions and activities that are performed in-house or domestically sourced to either non-affiliated or affiliated enterprises located abroad. A common vision for statistical data sharing is crucial and Istat is involved in the UNECE Task Force on Exchange and Sharing of Economic Data which develops guidance, tools and principles to facilitate the exchange of economic data, including granular data and information on business structures by NSIs. As global efforts are needed to address the challenges of measuring globalization, the guidance objective is also to facilitate the analysis of asymmetries and encourage coordinated economic data sharing while increasing the quality, coherence and granularity of statistics and the ability to better analyse the activities of MNEs. Even National Accounts Directorate Team is engaged to several international Task Forces addressing globalization-related issues, such as Integrated Global Accounts, land and non-financial assets, maritime transactions and International trade statistics.

3. EARLY WARNING SYSTEM

In the implementation of the ESS Vision 2020⁶ which is intended to explore new collaboration instruments to enhance consistency in the methodological approach and technical solutions for statistical purpose, in 2017 Eurostat, strengthening cooperation among its partners¹ launched the Early Warning System Task Force (EWS). The main objective of the initiative is to respond to globalisation events in a timely and consistent way across all Member States through facilitating the exchange of information on MNE restructuring cases which may affect other Member States. EWS aims to establish a structured and light procedure among involved National Statistical Institutes as well as International Organizations and Central Banks to ensure consistent methodological statistical treatment of major globalisation cases. Based on the voluntary cooperation between national data compilers and Eurostat, as well as between business statisticians and national accountants, EWS has been designed to facilitate a timely, consistent and interlinked communication among Member States towards relevant MNE cases affecting European statistics while enhancing European statistical comparability and supporting data reconciliation for EU NSIs. Particularly, EWS deals with restructuring within MNEs as the relevant information are difficult to obtain. Coordinated and supervised by Eurostat, the EWS process has been continuously improving over time though handling restructuring MNE cases across UE Countries and reporting the agreed treatment. The Eurostat purpose is to achieve consistency in the statistical treatment among Member States and a coordinated timing in the publication of statistical results and revisions, while strengthening the exchange of information among relevant NSIs. Within the EWS, the cases shared among Eurostat and Member States are anonymised and the information shared are preferably of a public nature.


In compliance of the BSDG decisions\(^8\) a network of contacts at national and Eurostat level has been established. As member of the system, each EU NSI has selected a correspondent and backup correspondent who can trigger the EWS in case of MNE restructuring affects other EU or non-EU Countries. Restructuring of MNEs identifies a change of group structure or distribution of business model across Countries, including the creation of new branches or other entities, the transfer of assets across borders, the changes of global production arrangements as contract manufacturing, for instance. Mainly focused on restructuring within MNEs, the EWS members may take into account the sizeable effects on European statistics over time, the published data, such as National Accounts main aggregates, the PEEIs, as well as the economic size and structure of the Countries concerned. Moreover, EWS can be consulted when national compilers have methodological doubts on treating MNE restructuring cases and even if the own Country is not directly concerned.

In case of the above-mentioned events, the Member State triggers EWS through drafting an initial summary note containing the significant information such as detailed facts of event, public source references, the main effects on business statistics, the national statistical domains concerned, the list of the other Countries affected, the proposal for treatment and plan for publication. Once the restructuring case is reported to the EWS secretariat, Eurostat informs only the Countries concerned by MNE event. In close cooperation with the concerned Member States, Eurostat drafts a methodological summary note containing an anonymised summary of the case and methodological treatment. Eurostat coordinates the communication and manages all the shared and anonymized documents such as the methodological note and Member state opinions through a collaborative platform named S-CIRCA with restricted access. S-CIRCA is accessed via a two-step authentication procedure, password and code sent to registered mobile phone. This exchange system allows to share confidential information while storing relevant documents. EWS secretariat discusses the case with the concerned Member States and they prepare a first opinion on statistical treatment. When interpretation questions remain, the EWS may acquire comments on draft opinion from competent ESS bodies. Afterwards, the agreed opinion containing the coordinated dissemination of the statistical result and the anonymised summary of the case are shared with the other Member States, which may offer their additional views. Finally, in case of a visible impact on the data released, an anonymised explanatory note on the specific case is released to create consistency in statistical treatment while enhancing the response to similar cases.

4. **Istat commitment in EWS**

In meeting the needs of an ever-changing society and the new requests for information on MNE related issues, the Italian Institute of statistics is committed to Early Warning System through the Large Cases Unit (LCU). Established in 2017, the main objective of LCU is to enhance Istat capacity to consistently manage MNE incoming data at the very beginning of the production process of economic statistics, in order to ensure a prompt reaction to the resolution of anomalies before they are processed by any of the statistical domains. In liaison with the other Istat Directorates,

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\(^8\) Director of Macro-Economic Statistics (DMES) and the Business Statistics Directors Group (BSDG), The joint BSDG/DMES Task Force on globalization, meeting 03/2017
as National Accounts and Data Collection for instance, LCU aims to identify potential inconsistencies in the early stages of the statistical production process, while ensuring statistical quality and containing the burden on enterprises. According to the Istat Modernisation Programme, focused on developing and sharing a new model of cross-cutting and cooperative work, LCU strives to strengthen the cooperation across the various statistical domains, by informing the internal users on the main restructuring events and by promptly identifying methods to cope with consistency problems. The Figure 1 shows the structure of the LCU positioning within Istat framework.

Large Cases Unit positioning

By dealing with restructuring events, mergers and acquisitions concerning the main MNE Groups, the LCU activity is carried out by a team of experts who keep working in different statistical domains. The establishment of the specialized, part-time team has played a key role in enhancing the quality, consistency and coherency of MNE data, as well as in ensuring the information sharing among the statistical areas. The selected team members mainly work in the following statistical areas: Business registers (SBR), Structural business statistics (SBS), Short-term statistics (STS), Foreign affiliates statistics (FATS) and Foreign Trade statistics. Hence, Istat decided to establish LCU within the Directorate of Business statistics while liaising with the representatives of the National Accounts Directorate in the relevant activities. The LCU team daily task is to analyse the signals of the MNEs target by carrying out several monitoring activities. The MNE events to monitor are Business Groups’ restructuring which may arise either from strategic business plans or from new business

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opportunities in other Countries, for instance. Concerning monitoring activities, significant to evaluate the MNE events at ex post stage are the information collected from the Istat Business Portal, which is the web platform to retrieve data and to manage the contact with the enterprises. Whereas at ex ante stage, the activity of ‘public news scrapers’ is crucial to gather relevant information concerning MNE from specialized newspapers and magazines. The MNE shared public news are monitored and they produce effects from an identifiable date by influencing statistical data production. Also, the activity of analysing Foreign trade data is conducted for monitoring purpose. Concerning the external work stream with MNEs (Yon and Walter, 2018), generally, an expert from the LCU is responsible for contact with the MNE in order to build trust and efficiency in data collection and solve complex cases.

Internationally speaking, LCU is engaged in EWS through Istat correspondents who coordinate the relations with the EWS members, manage effectively the outward and inward flows of signals, actively participate to the case discussion as well as draft concise and punctual report concerning the relevant cases. At the end of 2019, EWS network analyzed 21 cases (of which 12 closed cases). At national level, Istat has received 6 inward cases and Istat correspondents have produced 2 outward cases triggering EWS secretariat. Although the numbers may seem small, the management of information flows resulting from the commitment to the EWS activities within the broader context of the LCU framework has led EWS correspondents to develop some significant operating procedures to assess the impact of corporate reorganizations across the statistical domains. The specific Istat triggering processes for Outward and Inward MNE case flows are described below (Figure 2 and 3).

In October 2017, the Italian Institute of Statistics correspondents triggered the EWS secretariat by drafting the first outward MNE case for Italy (Figure 2). The EWS process started in the second trimester of 2017 when Large Cases Unit received a signal from Turnover Survey expert within Short Term Business Statistics (1). LCU investigated the trend of MNE Industry Turnover and the relevant domains were involved such as Structural Business Statistics (SBS), the Statistical Business Register (BR), the Foreign Affiliates Statistics (FATS), the Statistics of industrial goods and services (Prodcom) and Foreign Trade statistics. In the third quarter of 2017, Short Term Business Statistics expert needed to delve into MNE financial statement while contacting directly MNE reference person in the business portal (2). By receiving a data confirmation related to the MNE restructuring, also National Accounts experts were involved, and the statistical revisions was coherently implemented across domains, accordingly (3). After acquiring information on public sources, Istat correspondents triggered the EWS secretariat (4) by drafting a case summary, containing the MNE event details (new greenfield investment in Italy), the signal (the company turnover and the number of employees have significantly grown), effects in statistical domains (Industry Turnover Index, SBR, SBS), Countries potentially affected (investment and reconversion plan for manufacturing plants in other Member States). Moreover, Istat correspondents suggested to EWS also a proposal for treatment and plans for publication in order to harmonize statistical procedures and methods. EWS secretarial triggered the concerned Member States through sharing the MNE case and asking for a contribution in terms of statistical impact and data publication (5). Once the Opinions by the involved Countries were gathered (6), EWS produced a Methodological summary note containing the recommendations on treating the relevant statistics, shared with the involved Member states. Finally, an Anonymised explanatory note is drafted with the case description and the agreed methodological treatment for statistical unbalances has been shared among EWS members (7).
With regard to the inward MNE cases, at the beginning of 2018 Istat correspondents received from EWS Secretariat a signal about an MNE reorganization containing MNE public and descriptive information (1). The Figure 3 shows the flow of inward MNE case.

EWS inquired also, whether the impact on national statistics was significant in the Country (2). The signal regarded the MNE decision to move to a local selling structure in several Countries triggered an internal consultation within LCU (3). The relevant statistical domain experts were involved, particularly those working on Business register, to acquire the main enterprise characteristics, Short-term statistics and National accounts, to analyse the effects on in short-term surveys. Some detailed information were also asked about monthly balance-of-payments data but the statistical data were not available as the Italian Central Bank is in charge of producing that. Moreover, the public news scraping activity was conducted to find relevant information on the MNE planned reorganisation and business strategy. Istat responded to EWS with a brief note containing an overview on the MNE statistical profile and questioning about the economic activity classification (4). The EWS final methodological note was available at the end of 2018, by underlining the need of a harmonized and comprehensive treatment of economic activity among Member States in order to assign the same NACE code to the several subsidiaries, in compliance with the new business model (5). The EWS mechanism has strengthened the information exchanged by keeping the Member States informed about MNE case further developments.
The analysis of the EWS inward case allowed Istat to include the enterprise unit in the Quarterly Survey on Turnover of the services in 2018 as well as to change, eventually, the MNE Economic Activity (NACE code).

For internal users LCU produced a comprehensive report of the MNE case containing the following items:

- the description of the events, signal types (EWS signal) and data available;
- the impact evaluation for the statistical production in terms of statistical units (Groups, enterprises, legal units and partially local units) and variables (particularly employment, turnover, economic activity, location);
- the outcome of the preliminary analysis such as the potential impact and the proposals/decisions for the involved domains;
- the list of the involved statistical units (names and Register codes).

Through Early Warning System, Istat LCU strives to adopt a comprehensive approach in dealing with the MNE cases, by streamlining the response to statistical inconsistency and by aligning methodology procedure. However, the application of existing statistical methods does not automatically guarantee a consistent treatment of restructuring cases by all concerned data compilers. Hence, in some cases the restructuring events may require different statistical treatment and some Countries affected may still have different information about the MNEs.
5. **Key Elements of the Approach**

By analysing the steps described for outward and inward MNE case flows (Figure 2 and 3), four elements are considered as crucial in determining the degree of success of the process: EWS team personnel, statistical domain inter-relations, statistical information reporting, and co-operation with other National Authorities dealing with statistics. The above-mentioned elements are closely connected, professional skills, type of the relationships and tools available for data sharing are key elements in pursuing effective actions (see Figure 4).

Concerning the EWS team structure, Istat has decided to establish a small team composed by business statistics experts (a correspondent and a back-up correspondent) who take part in LCU monitoring activities concerning active MNEs in Italy. The main advantage of this structure is the timely dissemination of information cases to the domains mainly concerned, in order to quickly obtain a relevant feedback while following the assessment of other statistical domains to be investigated. However, the main critical aspect is the lack of automatic mechanism to identify the statistical domains to be involved. The case analysis and the personnel participation depend on *a priori* knowledge of the domains to be involved case by case, while a large team of experts would require more time to properly respond to a single case (see below for the comments related to statistical domains and other Authorities). Hence, a small group of experts as counterpart for EWS activities has resulted an “agile” solution to immediately identify experts to be involved on the Business statistics side and to cooperate with the National Accounts Team.
As mentioned in the paragraph 4, triggering procedure on restructuring within MNEs is conducted taking into account the sizeable effects on European statistics over time as well as the published data, such as National Accounts main aggregates, the PEEIs, the economic size and structure of the Countries concerned. This mechanism implies that several statistical domains are involved to analyse MNE case, hence statistical domain inter-relations development is crucial to have a comprehensive overview of economic implications. At first instance, restructuring of the businesses has consequences in terms of statistical Registers both for enterprises and Groups. Some MNE decisions may also have impact at the local level such as offshoring and reshoring business activities and functions. Concerning the PEEIs, this process affects different areas such as Balance of payments, Business, Industry and services statistics, International trade, Labour market, National accounts and prices. In many Countries, analysing the statistical implications in the all the above-mentioned areas may require the participation of both the National Statistical Organizations and the National Central Bank. At the EWS level, the European Central Bank (ECB) is a member of the System while Italian National Central Bank is not currently participating to the case analysis. Particularly, from Istat perspective, PEEs are produced by three different Directorates and statistical production is carried out by 8 Divisions, at least. From an operational point of view, a reference table has been developed in order to “give a name” (a reference person) to the PEEs. In addition to SBR and NA reference persons, each statistical output is linked to the focal point in charge of carrying out the activities, the head of division and the head of the Directorate in order to facilitate the internal information sharing concerning the MNE cases.

With regards to the statistical information reporting, the internal triggering of the process is conducted via e-mails, as EWS cases do not require micro-data sharing and generally exchange of information details are restrained. If further discussions on the case are needed also meetings on site can be scheduled. However, an impact assessment is internally conducted by all the domains concerned and this mechanism may require a quantitative analysis. When micro-data sharing is needed, secure environments are used. Each expert involved in the case contributes by sending data and drafting methodological proposals. Moreover, each member of the Team is able to enhance the expertise on MNE-related issues by learning from the information available and by cooperating with other experts. Through this participatory approach, EWS Istat team drafts Case national opinion to be shared with Eurostat by gathering all the contributions received from the statistical experts in an effective manner.

Regarding to the cooperation activities among the statistical domain experts, need to meet comprehensively the EWS goals is a challenging point. Responding promptly to Eurostat with National contributions is crucial to enhance consistency in statistical procedure at the European level. Having a small team focused on these activities determines the need to collect the main information available from the specialized experts on the statistical domains. While the option of having an “official” large team would require a “mandatory” involvement established by EWS. Nevertheless, the voluntary mechanism developed by Istat has allowed EWS correspondents to provide information at the different stages. However, the phase of the case follow ups and the analysis of the Eurostat methodological outputs result harder to pursue.

Finally, another aspect worth mentioning is the relation with other National Authorities when MNE case arisen from EWS mechanism. From the Italian perspective, the other Authority managing statistics relevant to the EWS cases is the National Authority relevant to the EWS cases.
Central Bank, named Bank of Italy. As seen in the inward MNE case, in the framework of EWS Istat is not currently sharing micro data with National Central Bank, even though Istat and Bank of Italy have a long tradition in cooperating together. At the moment, a mechanism to jointly - Istat and Bank of Italy - analyse the cases is missing. The lack of inter-institutional cooperation in dealing with MNE cases leads to wonder how and to what extent Istat and Bank of Italy may exchange and analyse micro-data: in this process the use of informal arrangements is not feasible.

The key elements of Istat approach, in terms of strengths and weaknesses, are shown in Figure 5.

### Istat approach

**Key elements, strengths and weaknesses**

<table>
<thead>
<tr>
<th>Key elements</th>
<th>Istat choices</th>
<th>Strengths</th>
<th>Weaknesses</th>
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<tbody>
<tr>
<td>Team personnel</td>
<td>• Small</td>
<td>• Agile</td>
<td>• Highly dependent on experts</td>
</tr>
<tr>
<td></td>
<td>• Inside LCU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistical domain inter-relation</td>
<td>• Participation case by case</td>
<td>• LCU focal point for case treatment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Bridging table «domain-reference person»</td>
<td>• Complete mapping of the internal experts</td>
<td></td>
</tr>
<tr>
<td>Statistical information reporting</td>
<td>• Via emails</td>
<td>• Flexible</td>
<td>• No mandatory</td>
</tr>
<tr>
<td></td>
<td>• Secure communication when needed</td>
<td>• Case oriented</td>
<td>• Different Directorates and Divisions</td>
</tr>
<tr>
<td>Co-operation with other Authorities</td>
<td>• No joint analysis</td>
<td></td>
<td>• Lower participation for follow ups</td>
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<td></td>
<td></td>
<td></td>
<td>• Tracking over time</td>
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Sources: Istat

The Figure 5 highlights Istat strategy in dealing with MNE cases by prioritizing prompt actions and being flexible in conducting statistical analysis. In the above-mentioned cases (Figures 2 and 3), the process guarantees a prompt responsiveness in sharing information with EWS, even when Istat internal consultation covers different domains. In the meanwhile, this "soft" mechanism of inter-relations, useful at the first stage for case statistical treatment, is not always enough to follow the MNE event developments. Moreover, the final methodological treatment notes disseminated by Eurostat are not mandatory for Member States. The Figure 5 also underlines the most critical element, which is lack of NCB involvement in the EWS mechanism: Istat joint analysis with Bank of Italy experts about MNE cases would provide a more comprehensive statistical overview.

### 6. CONCLUSIONS

The paper explores Istat experience in contributing to the EWS network. The analysis draws the attention to the statistical information flows in the framework of the EWS, by showing the inward and outward triggering processes. The internal mechanisms to share and treat the cases are explored, by underlying the role of EWS Team in monitoring concerning MNEs complex restructuring and changes. Four key
elements are considered as crucial in providing successful outcome of the mechanism: EWS Istat Team personnel, statistical domain inter-relations, statistical information reporting, and co-operation with other National Authorities dealing with statistics. In Italy an agile and flexible approach has been adopted, based on the domain experts’ participation and the cooperation on a voluntary basis, having a positive effect in the first two years of the network activities. EWS Istat Team coordinates the activities to gather the experts' contributions and they draft the final responses to share information with EWS secretariat, accordingly. In the last years, however, the analysis of the cases has shown some weaknesses linked to the lack of participation of the NCB and the micro data and confidential information protection.

Further developments and challenges of the EWS are needed to improve the statistical treatment of restructuring events. By our experience, the inter-institutional cooperation and legal framework play a key role in consolidating the EWS process. In the light of the experience gained with new globalization cases, Eurostat has planned some developments for the EWS mechanism. The lessons learned underline that the cooperation between National Statistical Authorities (inter-institutional work stream, according to Yon and Walter, 2018) as well as between the Member States are crucial. In addition, to facilitate the exchange of information among Member States, as well as to ensure consistency among Member States also a legal framework is needed. Establishing a legal basis for EWS should facilitate the exchange of micro data between National Authorities dealing with statistics, as well as to have a comprehensive overview of MNE event impact on statistics. Moreover, to enhance the expertise of EWS correspondents in dealing with MNE cases, also training initiatives should be realized by Eurostat. EWS Training would enhance the expertise of correspondents about EWS case management, as well as that would enhance the consistent use of statistical methods and procedures among Member States.

Concerning the National level, strengthening the participation in the EWS cases, new procedure to facilitate the inter-institutional joint analyses of the cases should be identified. From our point of view, informal mechanism to involve the NCB is not a feasible solution especially in sharing and analysing data and methodological information exchange. A compulsory and recognized procedure between Istat and Bank of Italy needs to be established in order to facilitate Istat ESW team role in providing a comprehensive overview by collecting information as far as balance of payments and financial accounts are concerned. In the meanwhile, a parallel mechanism should be implemented allowing NCB experts to trigger EWS Istat Team when statistical unbalances reveal MNE restructuring event.

As Globalisation means increasing interdependence, integration and interaction between institutions, people and companies in disparate locations, also statistical Authorities need to respond to the growth of cross border data flows by co-operating together in increasing the number of standards applied globally and finding new tools for comprehensive statistical information sharing.
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Early Warning System (EWS) informative flow weaknesses and opportunities  
The Italian experience

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Globalisation presents conceptual difficulties and measurement challenges in providing data for policy purposes

- Growing cross-border interactions and increasing in openness of nations bring measurement challenges for suppliers of micro and macroeconomic data.
- The dividing line between resident and non-resident economic units – a major distinction for macroeconomic statistics is fading.
- Statistics are usually bound to national borders, but the economic events go beyond national borders.

Globalisation is a new challenge for NSIs.
Istat commitment in measuring globalisation

Italian National Institute of Statistics is committed to creating a consistent harmonized framework for measuring the inter-connected global economy through:

- Focusing on Global business actors: Multinational enterprise groups (MNE)
- Identifying the real dimensions of the enterprises and understanding the structural market effects
- Harmonizing statistical methods and techniques among National Statistical Institutes

**National Statistical production associated to globalisation:**
- International Trade of goods and services
- Foreign Affiliates (FATS)
- Foreign Direct Investments (FDI) statistics
- International Sourcing (IS)

**International projects:**
- EuroGroups register (EGR)
- International profiling
- UNECE Task Force on Exchange and Sharing of Economic Data
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MNE economic decisions crossing national borders have sizeable effect on European business statistics and National Accounts

- to ensure a consistent treatment of globalisation events in statistics;
- to timely exchange information regarding globalisation events with cross-border effects on business statistics and National Accounts;
- to contribute to the need of identifying and realizing standards for statistical production;
- to enhance European statistical comparability and supporting data reconciliation for EU NSIs;
- to increase responsiveness to emerging globalization issues;
- to harmonize Statistical procedure and methods.
Restructuring of MNEs identifies a change of group structure or distribution of business model across Countries, including the creation of new branches or other entities, the transfer of assets across borders, the changes of global production arrangements.

**PILLARS**
- structured and light procedure among NSIs as well as International Organizations and Central Banks
- Based on the voluntary cooperation
- Anonymized case description: collaborative platform named S-CIRCABC with restricted access
- Exchange information: Eurostat methodological note and Member state opinions
- Selected a correspondent and backup-correspondent by NSIs

**OPINION**
- Detailed facts of event
- Impact
- Statistical domain/indicators
- Other Countries affected
- Proposal for treatment
- Plans for publication
BACKGROUND

EARLY WARNING SYSTEM

LARGE CASE UNIT

OUTWARD AND INWARD FLOWS

ISTAT APPROACH: STRENGTHS AND WEAKNESSES

STEP FORWARD
Large Case Unit

**BUSINESS STATISTICS DIRECTORATE**

**Large Cases Unit**
**EWS CORRESPONDENTS**

Production of statistics

- FATS
- SBS
- SBR
- STS
- Prodcom
- External Trade

**OBJECTIVES**

- by strengthening **cooperation** across the various domains;
- by sharing **information** of restructuring cases;
- by creating specific **data reporting** for single Groups;
- by developing **methods** to promptly identify consistency problems.

Co-operation with **National Accounts**:
- common and coherent treatment for specific and complex cases
- consistently management of the globalization aspects

Co-operation with **Data Collection Directorate**

EWS informative flow weaknesses and opportunities – the Italian experience
Lisbon, 18 February 2020
BACKGROUND

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ISTAT APPROACH: STRENGTHS AND WEAKNESSES

STEP FORWARD
Outward MNE case

May 2017
Signal from turnover survey

Further research in June 2017:
- Financial statement 2016
- NA involvement

1

Istat
LCU

SBR
SBS
Prodcom
FATS

2

Methodological summary note (S-CIRCA)
Anonymised explanatory note

3

Case summary in Sept 2017

4

TRIGGERING

Eurostat
EWS

Feedback collection:
Opinion from MS

6

Exchange of information among concerned MS:
- Initial summary note
- Opinion

5

EWS informative flow weaknesses and opportunities – the Italian experience
Lisbon, 18 February 2020
Inward MNE case

1. In 2018 Company announced changes in business model

2. Initial summary in March 2018

3. Internal consultation

4. Opinion (S-CIRCA) in April 2018

5. Feedback collection: Opinions from MSs (S-CIRCA)

6. Methodological summary note (S-CIRCA)

7. Unit inclusion in the Quarterly Survey on Turnover of the services in 2018

Eurostat EWS

Istat LCU

SBR

STS

NA

EWS informative flow weaknesses and opportunities – the Italian experience
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BACKGROUND

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OUTWARD AND INWARD FLOWS

ISTAT APPROACH: STRENGTHS AND WEAKNESSES

STEP FORWARD
Istat approach in EWS process

- Description of the events, signal types;
- Assessment for statistical units (Groups, enterprises, legal units, local units) and variables (employment, turnover, economic activity, location);
- Outcome of the preliminary analysis => potential impact and the proposals/decisions for the involved domains;
- List of the involved statistical units (names and Register codes).
Istat approach assessment

**STRENGTHS**
- Agile
- Skilled staff
- LCU focal point for case treatment
- Complete mapping of the internal experts
- Flexible
- Case oriented
- N/D

**WEAKNESSES**
- Highly dependent on experts
- No mandatory
- Different Directorates and Divisions
- Lower participation for follow ups
- Tracking over time
- No comprehensive picture

**TEAM PERSONNEL**
**STATISTICAL DOMAIN INTER-RELATIONS**
**STATISTICAL INFO REPORTING**
**CO-OPERATION WITH OTHER STATISTICAL AUTHORITIES**
Content

- **BACKGROUND**
- **EARLY WARNING SYSTEM**
- **LARGE CASE UNIT**
- **OUTWARD AND INWARD FLOWS**
- **ISTAT APPROACH: STRENGTHS AND WEAKNESSES**
- **STEP FORWARD**
Step forward in implementing EWS

- **Legal Basis Needed**

- **Inter-institutional work stream and Co-operation among Member States to be enhanced**

- **EWS correspondents training to be fostered**

- **Co-operation with Bank of Italy (National Central Banks) to be established**

- **Secure framework for exchanging data and information to be settled**
Thank you for your attention

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