

## **Presidential Address**

# **The Changing Patterns of Production and Consumption of Official Statistics in Ireland 1989-2019**

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**Abstract:** This paper examines the major improvements in Ireland's official statistics since 1989, a period of exceptional economic and social change in Ireland. The Irish Statistical System now produces statistics that are comprehensive and consistent with the Code of Practice for EU Statistics, and that support the increased use of high-quality evidence to inform policy making in Ireland. The paper identifies the key factors that have driven the improvements over a period that has seen the introduction of the Single Market and the Euro, EU Enlargement and Intensification, and the creation of EU and National Statistical Systems. The paper concludes by identifying the challenges for Irish official statistics in the coming decade, in a global context where misuse of information and fake facts prevail.

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**Keywords:** official statistics, evidence-informed policy, fake facts, globalisation, micro-data

**JELs:** C81, C82, E01

## **1. INTRODUCTION**

This year marks the 70<sup>th</sup> anniversary of the founding of the Central Statistics Office (CSO), a major institution in Irish society and one whose data and statisticians have been at the centre of many of the papers read to this Society over the past seven decades.<sup>1 2</sup> This period has seen exceptional economic and social changes in Ireland, changes which have been and continue to be documented by the CSO.<sup>3</sup> Just ten days ahead of this 70<sup>th</sup> anniversary, it seemed to me to be appropriate for the Society to review the developments in our official statistics for the first time since the Presidential address to the Society by Professor Jerry Sexton on the topic of "On Users and Producers of Statistics" in 1989.

The Sexton paper addressed many of the issues that had brought the CSO into the spotlight in the 1980s, a spotlight that was perhaps at its brightest at the Society's symposium in 1985, which I will return to later in this paper. Meanwhile, it is worth noting that the late John Blackwell drew attention to the importance of debating issues in the right context when he said, in his paper at the 1985 Symposium, that the Society is '*the only regular forum which brings together statisticians, social scientists and Government officials*'. In this paper, I draw heavily on the papers read at that symposium, on Jerry Sexton's Presidential address and on the paper presented by Tom Linehan at a meeting of the Society in 1998.<sup>4</sup>

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\*The assistance of the CSO in the provision of data for this paper is gratefully acknowledged, as are the valuable conversations with and very helpful comments from the current and former CSO Directors General, Pádraig Dalton and Gerry O'Hanlon. Since the delivery of the paper, I have received additional insightful comments from the two former Directors General I worked with when I chaired the National Statistics Board, Donal Murphy and Donal Garvey, and from Dr Patricia O'Hara, who chaired the National Statistics Board (NSB) from 2010-2018, and from Anne Vaughan, who currently chairs the NSB. To the greatest extent possible, I have taken these comments into account in this version of the paper for publication. These comments and the contributions of the participants at the meeting on 23 May 2019 are also gratefully acknowledged.

<sup>1</sup> Over this period, the CSO has had seven Director Generals: Roy Geary: 1949-1957; Donal McCarthy: 1957-1967; Tom Linehan: 1967-1991; Donal Murphy: 1991-2000; Donal Garvey: 2000-2007; Gerry O'Hanlon: 2007-2012; and Pádraig Dalton 2012 - present.

<sup>2</sup> Over the early part of this period, the other major sources of data have been: international organisations, ESRI, CBI, and once off-surveys, while more recently the papers presented have also drawn on Longitudinal Surveys, European Surveys, and Private Sector Surveys

<sup>3</sup> On the occasion of the 50<sup>th</sup> anniversary of its foundation, the CSO published *That was then, this is now: Change in Ireland, 1949-1999*, which anticipated the increasing use of visuals in the presentation of statistics. The 60<sup>th</sup> anniversary was marked by a seminar at Dublin Castle.

<sup>4</sup> The other occasion on which there was a SSISI Symposium on official statistics was 2014, when the topic was *Safeguarding Trust in Irish Official Statistics*.

To set our starting date in context, I will review briefly the forty-year period prior to 1989. I will then set out the key developments in what I see as the three decades of major change in the production and consumption of official statistics since 1989. These developments reflect changes in the external landscape, such as the growth and integration of the EU and the realization of what the information economy and society mean for official statistics. The developments also recognise (i) Ireland's need for better data to support the research and analysis underpinning policy development, (ii) the appreciation by the CSO of its responsibility to meet the specific requirements of users across many different domains, and (iii) the process of slow but steady reform in the Irish public sector. These domestic factors are reflected in the growth in the volume of CSO statistics and outputs, the increased engagement of CSO statisticians with policy-makers, and the development of the governance of the Irish and European statistical systems.

In the next two sections of the paper I will present some indicators of the changes in the production and consumption of statistics in Ireland over the three decades, and then look forward to the challenges and opportunities in the coming decades. The paper ends with a brief concluding section.

Before going further, and in the spirit of a world where we all declare our potential conflicts of interest, I want to advise that my perspectives in writing this paper are inevitably influenced by having chaired the National Statistics Board for over eight years, having been a member of two European Statistics Bodies focused on user needs (The European Advisory Committee on Statistical Information in the Economic and Social Spheres (CEIES) and the European Statistics Advisory Committee (ESAC)), and by being currently on the European Statistical Advisory Board (ESGAB). Furthermore, as Director of the ESRI, I promoted the increased use of CSO micro data in place of ESRI surveys, having had the benefit of being an early user of CSO micro data and having seen the long-term benefits to Irish research of the significant investment in Ireland's official statistics from the 1990s onwards.

## **2. A BRIEF SUMMARY OF THE DEVELOPMENT OF IRISH OFFICIAL STATISTICS, 1949-1989**

Given the importance of Ireland's membership of the European Community to the development of our official statistics, this section looks at this forty-year period in three phases related to EEC membership: the Pre EEC membership phase (1949-1972); the Early EEC membership phase (1973-1982) and the Developing EEC/EC membership phase (1983-1989).

### ***Phase 1: 1949-1972 – Pre EEC membership***

The establishment of the CSO in 1949 (on a non-statutory basis) was created by bringing together staff from the existing units that collected statistics, and building on those data that has been centred in the then Statistics Branch of the Department of Industry & Commerce. This new Office was headed up by Dr Roy Geary, who became the CSO's first Director, supported by a Deputy Director (Dr Donal McCarthy) along with four Statisticians.<sup>5</sup> A key decision at this time was to put the CSO under the Department of An Taoiseach, as a signal of its wide remit and its independence, which might have been seen as being compromised if it was under the Department of Industry & Commerce or under the Department of Finance.

The new body got off to a strong start with a number of key developments. The first was to formalise that Ireland would have a census every five years – this was a more regular rate than for many other countries, and deemed necessary because of the scale of migration (internal and external) and of social change at the time. The second was the issuing of annual national accounts (on which Geary was a particular expert), and having a new household budget survey (HBS) which was vital to measure changes in the cost of living.<sup>6</sup> Also instituted was a census of distribution and services and two surveys directly related to the agricultural sector: a survey of farm incomes and a survey of crop yields.

However, after that initial strong start, development was quite slow – something which is evident when you review the paucity of data available to inform policy in the late 1950s and 1960s (as evident in Whitaker's *Economic Development* in 1958 and the various economic programmes in the 1960s). Given the growth and restructuring of the economy during this period, as well as the scale of social changes, this looks somewhat surprising from where we stand today.

In the late 1960s with the possibility of EEC membership looming on the horizon, a committee was established in 1968 to identify along with the identify the list of statistical priorities in the context of Irish's membership bid.<sup>7</sup>

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<sup>5</sup> See TP Linehan (1998) for more details on this period.

<sup>6</sup> The HBS collected detailed data on household expenditures.

<sup>7</sup> This committee, which was established in 1968, published its report in 1974.

This heralded the important role that meeting EEC requirements has played in Irish official statistics in the five decades since then, as government has to provide the resources required to produce any mandatory data series.

### ***Phase 2: 1973-1982 – Early EEC membership***

Mandatory requirements for Ireland consequent on EEC membership included the establishment of the Labour Force Survey, a more regular HBS, monthly production indices and more trade data. While these series had to be prioritised because of our EEC membership, they were series that one would expect to have available in an OECD country; that said, it should be noted in the early 1970s, Ireland was very much at the bottom of the OECD league. There was a continued concentration on agricultural statistics, despite the sector's declining share in total output, because of the data required to support the implementation and operation of the EU-wide Common Agriculture Policy. Other data were requested by Eurostat, but these were not mandatory.

Across the public service, EEC membership brought new external reference points for Ireland, extending beyond and replacing the traditional reference point of the UK. In the case of statistics, this involved close engagement with Eurostat and a significant growth in statistical resources for the CSO, albeit from a relatively low base, allowing it to deliver on its EEC requirements.

### ***Phase 3: 1982 – 1989 - Developing EEC/EC membership***

As the European Common Market began to develop further, the European statistical system developed alongside it. These European statistical developments influenced the development of Irish statistics and were prioritised because of the legal mandates and because they were a basis for securing additional resources for the CSO.<sup>8</sup>

During this period, the Irish economy's economic performance was at rock bottom – even when looked at with reference to the period of the Great Recession in the second decade of the 21<sup>st</sup> century. The state of the economy was reflected in a growing interest in economic policy, and an expanding research community in Ireland. A strongly expressed view at the time was that Irish statistics had not developed adequately, and that important areas were not covered unless they were mandated by the European Community.<sup>9</sup> Furthermore, the Taoiseach of the day, Dr Garret Fitzgerald, a longstanding member of this Society, had a strong interest in, and exceptional knowledge, of Irish statistics. These factors came together to heighten an awareness that a more strategic and planned approach would help the development of Irish statistics.

In 1984, the Government established a Statistical Council,<sup>10</sup> under the chairmanship of the late Professor Denis Conniffe, to review and report on the state of Irish official statistics. Around the same time, the National Economic and Social Council (NESC) asked John Blackwell to produce a paper on *Information for Policy*, with the intention of identifying the data needs of policy makers. The Statistical Council Report was published in January 1985, and its analysis and conclusions fed directly into a Government White Paper (*A New Institutional Structure for the CSO*) which was published in October 1985. The NESC report was published in July, 1985.

These reports, combined with the growing demands for more data and for greater access to existing data sets, led directly to the symposium in this Society on *Statistics for Policy and Research* in November 1985. Taken together, the reports and the symposium paved the way for very major changes in Irish statistics, starting in the 1990s. Indeed, reading the papers from this symposium almost forty years later reminded me of how much change has taken place since then.

Let me provide a brief summary of the three papers delivered: John Blackwell's paper, based on the NESC Report, focused on the costs of the weak link between statistics, research and policy in Ireland – in effect the absence of the evidence required to inform policy. He identified serious gaps in the statistical series available and was critical of the lack of coordination, quality control and integration in the production of statistical across the whole system, arguing that this reduced the value to be drawn from them for research and policy. Finally, he identified three further criticisms: the underutilization of administrative records as a basis for generating statistics for research and policy, the limited access to data available to researchers and analysts in Ireland, and the absence of a data archive to hold the survey data collected outside the CSO.

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<sup>8</sup> Irish statistics also benefited from the engagement of Irish statisticians in the technical discussions which became a central part of the development of the European Statistical System.

<sup>9</sup> In addition, two areas of controversy at the time were directly related to official statistics – the 'black hole' and 'milk super levy'.

<sup>10</sup> There was a discretionary provision in the 1926 Statistics Act for a Statistical Council but this was not progressed. See Linehan (1997), page 69.

Denis Conniffe's paper, drawn from the recommendations of the Statistical Council Report, set out what was required of the CSO to improve Irish official statistics. He argued that the CSO required more flexibility and autonomy to engage in multiannual planning which could increase the efficiency and effectiveness in producing statistics. At the same time, he maintained that the CSO should recognise the wider range of users of its data, and not simply see its role as being to serve the demands of Eurostat. He said that the CSO required the legal powers necessary to coordinate statistics in Ireland, thereby dealing with some of the factors that reduced the value for research and policy of the data collected by various agencies. He spoke to the need for the CSO to modernise its processes and proposed that this could be achieved by widening its skill sets, having secondments across civil service departments, employing new statistical methods, and increasing the use of computers in processing data.

Since this was a period of very stretched resources in the public sector, the Blackwell and Conniffe papers suggested that a lot could be achieved by better use of existing resources. These suggestions were strongly contested in the third paper at the symposium by Tom Linehan, the Director of the CSO. He argued that significantly more resources would be necessary if the CSO is to deliver the key statistics proposed and to coordinate the wider set of national statistics. While accepting the merits of multiannual planning, Linehan stressed the challenges involved in setting the required priorities and expressed some concerns that this process would not undermine the 'independence' of the CSO or reduce its operational flexibility. He also emphasised the importance of not doing anything that could undermine statistical confidentiality or the integrity of Irish official statistics.

Almost forty years later, one can feel a palpable level of tension when reading the papers, with those outside the CSO believing that much could be achieved without major increases in resources, while the Director of the CSO noted that these outsiders could not really understand the demands on and constraints faced by those working within the Office. It was a classic case of radicals versus conservatives. The discussion that followed included two further important contributions. The first was from Sean Cromien, then Secretary of the Department of Finance; he was sympathetic to the calls for better statistics but stressed the resource constraints, suggesting that the additional statistics and services might be financed by charging for statistics. The second paper by John FitzGerald, which was almost as long as some of the main papers, set out in great detail the potential gains from computerization, which had not been covered in the other papers. In this way, he bridged some of the gap between the views of the outsiders and insiders.

In 1986, the year after the Symposium, the Government created the National Statistics Board (NSB) on an interim non-statutory basis. This was a major development for the Irish statistical system, with the NSB's role being to set out overall strategy for Irish official statistics and to identify priorities that would guide the CSO. The NSB immediately introduced a greater user focus, with various different groups of users being represented on the Board, along with the Director General of the CSO. The NSB gave a commitment to undertaking and publishing the results of regular user surveys, thereby helping to address the criticisms of user neglect expressed at the 1985 Symposium. In the context of this strategy and the defined priorities, the CSO designed its own corporate strategy, on which it reported separately, clarifying the distinctly different roles of the CSO and the NSB from the outset. The NSB's first strategy for statistics in Ireland, developed under the chairmanship of Professor Paddy Geary, paved the way for developments in the following three decades.

### **3. THREE DECADES OF MAJOR CHANGE**

Following the approach adopted above, this section also uses EU developments to contextualise the changes over the last three decades. In the case of each decade, I look in turn at how EU developments and domestic developments impacted on the evolution of Irish official statistics.

#### ***1989-1999 – The Single Market and the Euro***

*EU Developments:* Preparation for the Single Markets and Economic & Monetary Union significantly increased the mandated requirements for data produced by national statistical institutes (NSIs) across the EU.<sup>11</sup> From an Irish perspective, there was a major focus on improving the range of data available on a quarterly basis, leading to the investment in Quarterly National Accounts and in the upgrading of the Annual Labour Force Survey to the Quarterly National Household Survey (QNHS). The QNHS was designed primarily to collect quarterly data on the labour force but also to collect data that would both inform the social agenda that was becoming more prominent in the EU and to meet the requirements of the social partnership model that was rapidly developing in Ireland at that time.<sup>12</sup>

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<sup>11</sup> NSI is the name commonly used for statistical offices in the EU

<sup>12</sup> Within Ireland, the Social Partnership Model generated new demands for social statistics, helping to redress the longstanding emphasis on economic statistics in Ireland. These demands were used by the CSO to lever additional resources for the QNHS.

Furthermore, the plan for greater economic integration in the EU emphasised the need for the methodologies adopted in different countries to produce data of high quality, that were comparable and available sufficiently quickly for Eurostat to issue EU-wide statistics on a timely basis.<sup>13</sup> At the same time the freer movement of goods and services meant that new methods were required to collect data on goods and service trade. These new demands contributed to increased resources being made available by government to the CSO, so that it could meet the greater demands and higher standards set by Eurostat.<sup>14</sup>

The production of European Statistics also became more regulated with the increasing adoption of EC Council Regulations and Directives requiring the mandatory provision of statistics by the Member States in almost all statistical domains. In 1997 the first “European Statistical Law”<sup>15</sup>, which was finalised during the Irish Presidency in the second half of 1996, was adopted and this laid down new standards for the production of European Statistics: common principles; governance arrangements; and a common understanding of statistical confidentiality and the right of access to administrative data for statistical purposes.

*Domestic Developments:* There were significant legislative developments in this period, following on from the reports of the 1980s, embedded in the 1993 Statistics Act. This Act replaced the 1926 and 1946 Statistics Acts, which had provided the legislative basis for the production of official statistics up to that time. The 1993 Act was comprehensive and forward looking, covering the establishment of the CSO<sup>16</sup> as an independent body, the creation of the National Statistics Board (NSB)<sup>17</sup>, the mandate for data collection (including access to administrative sources), the definition of an ‘officer of statistics’ and of statistical confidentiality. *Inter alia*, the legislation made provision for the CSO to cooperate with other bodies in the civil and public sectors to increase the range and quality of our national statistics and to allow for increased user access to data, and specifically to micro data under new confidentiality standards. The NSB quickly expressed its view that official statistics were a genuine public good and consequently should not be subject to user charges; this development echoed the views expressed in Jerry Sexton’s address to this Society in 1989.

The major turn-around in the economy in the early to mid-1990s brought renewed emphasis on public service reform driven by a greater customer focus, compared to the traditional processes in the public service which were more producer focused. In the case of statistics, the NSB commissioned, with the agreement of the CSO, consultants to undertake a *Review of Organisational Performance and Capability of the Central Statistics Office*.<sup>18</sup> The key recommendation of this review was that the CSO should move from its traditional product approach to managing and processing data towards a more process-based approach, similar to that being adopted increasingly by the more advanced statistical offices internationally.<sup>19</sup> This represented a very significant change for the CSO over the following decade, and, when supported by major IT investments, paved the way for it to realise potential efficiencies across the whole system. These included the potential to generate new statistical outputs, reduce respondent burden and to increasingly incorporate administrative data into the production of official statistics.

### **1999-2009 – EU Enlargement and Intensification**

*EU Developments:* The planned intensification of the EU, in terms of its economic relationships, combined with the decision to expand the EU, with the addition of the ten Central and Eastern European countries, formerly under the USSR sphere of influence, made this a very hectic decade for all aspects of the EU’s activities, including in the statistical domain. In line with global developments, there was a major focus on macroeconomic statistics, as phenomena such as foreign direct investment, increased international financial flows, outsourcing, offshoring and global value chains became increasingly important. There was also pressure to improve the volume and timeliness of European economic indicators and to conceptualise and measure the impact of ICT on productivity.

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<sup>13</sup> This increased focus on timeliness was a particular challenge for the CSO as the disruption of the decentralisation of the bulk of its activities to Cork, and the consequent requirement to appoint many new inexperienced staff, resulted in a loss of timeliness which had to be made up over a number of years. This was achieved with the very considerable efforts of CSO management and staff at the time.

<sup>14</sup> Notwithstanding the complaints of some Irish analysts that Eurostat dominated the prioritisation for Irish statistics, arguably in the absence of EU requirements, the actual investment in Irish official statistics would not have been as great.

<sup>15</sup> Council Regulation (EC) 322/97 of 17 February 1997 on Community Statistics

<sup>16</sup> This period also saw the upgrading of the Director post in the CSO to Director General, putting it on a par with the level of Secretary of a government department.

<sup>17</sup> There have been five NSB Chairs since 1986: Paddy Geary: 1986-1993; Frances Ruane: 1994- 2003; Brendan Walsh: 2004 – 2009; Patricia O’Hara: 2009-2018; Anne Vaughan: 2019 – present

<sup>18</sup> The review was undertaken by Deloitte and Touche, with inputs from specialists in official statistics from New Zealand and The Netherlands, and completed in 1997.

<sup>19</sup> The product approach meant that data were collected specifically with an eye to a particular statistical product, e.g., industrial output, while under the process approach data were collected with an eye to inputting into multiple statistical products.

The development of Social Europe was reflected in the addition of a new mandatory household survey, the EU Survey on Income and Living Standards (SILC),<sup>20</sup> and in the number of mandatory modules in the QNHS.<sup>21</sup> These surveys have provided key data for measuring social inclusion and poverty across the EU. At the same time, to improve the quality of European statistics, the *European Statistics Code of Practice* was introduced in 2005 to complement the European Statistical Law and provide a comprehensive and common quality and ethical framework for the production of European Statistics across the whole EU.<sup>22</sup>

*Domestic Developments:* In the early 2000s, the NSB and the CSO combined to explore how the powers of the Statistics Act (1993), which allow the CSO to access data holdings of government departments and agencies, might be employed to enable greater use of administrative records for statistical purposes. This began with the NSB establishing a *Steering Group on Social and Equality Statistics* (SGSES) which brought a group of departments together to build a shared understanding of how departments were using both CSO data and their own administrative data for analytical purposes. Following the report of the SGSES,<sup>23</sup> a second group was set up to focus on economic and environmental statistics. These Groups provided a context for a set of CSO projects which looked at the *Statistical Potential of Administrative Records* (the so-called SPAR projects) across the full range of relevant government departments. These led in turn to plans for each department to have its own data strategy, putting the CSO in a better position to harness the benefits of administrative data in the following decade.<sup>24</sup> This development also pointed to the urgent need for Ireland to create unique identifiers (individual, spatial and business) to enable data linkage. The practice of CSO seconding statisticians to different government departments helped to grow an awareness of the benefits for departments of improving their data holdings.

Starting in the early 2000s, the CSO also began to produce some thematic summary reports, including *Measuring Ireland's Progress*, which was designed in consultation with the NSB. Over the course of the decade, major IT developments<sup>25</sup> facilitated the CSO providing (i) users with direct access via its website to aggregated data files for further analyses<sup>26</sup>, (ii) customised analyses to users where the underlying data could not be released for confidentiality reasons, and (iii) anonymised data for inclusion in the Irish Social Science Data Archive based at University College Dublin.

#### **2009-2019 – EU and National Statistical Systems Approach**

*EU Developments:* The most recent decade has seen the evolution of a strong systems approach across the European Statistical System, covering data holdings of both the national statistical bodies and Eurostat, along with those of other European Commission bodies, and all of the bodies within countries that are sources of official national statistics;<sup>27</sup> collectively these are the European and national systems of official statistics.

These changes were brought about through the introduction of a new legislative framework in 2015, Regulation (EU) 2015/759 on European Statistics.<sup>28</sup> The regulation strengthens the mandate of the CSO and creates a new opportunity and requirement for it to engage with the other (14) national compilers of European Statistics in Ireland. Under this legislation, the CSO's Director General is now required by EU law to ensure that all Irish producers of European statistics are adhering to prescribed quality standards and to the European Statistics Code of Practice (ES CoP).<sup>29</sup> The ES CoP is crucial to ensuring that statistics produced within the European Statistical System (ESS) were consistently produced, relevant, timely and accurate, and that they complied with the principles of professional independence, impartiality and objectivity.

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<sup>20</sup> This was the first major investment by the CSO in statistics that would inform directly on poverty and social inclusion. It replaced an earlier survey (Living in Ireland) which had been undertaken by the ESRI.

<sup>21</sup> Some countries also introduced time use surveys, but these were not mandatory.

<sup>22</sup> This was one of the most significant developments for EU statistics in the past five decades, and had strong support and significant inputs from the CSO.

<sup>23</sup> Its report *Developing Irish Social and Equality Statistics to meet Policy Needs* was published in 2003.

<sup>24</sup> In effect the 1993 Act was an enabler of this development, with the CSO progressing the approach with the support of the NSB and the Departments of the Taoiseach and Finance to organise that resources became available to make real progress.

<sup>25</sup> The development of the CSO IT capacity during that period was enhanced by the Cogniscent project, which ran for almost a decade, starting in 2003.

<sup>26</sup> These data bases were centred on Statbank, and now include links to other public sector data bases and to Eurostat data bases. <https://www.cso.ie/en/databases/>

<sup>27</sup> These other national authorities (ONAs) include the regional authorities (e.g. the Länder in Germany), bodies holding health or education data (e.g., the HSE and the HEA in Ireland) etc.

<sup>28</sup> It amended Regulation (EC) No 223/2009 on European Statistics.

<sup>29</sup> This legislation reinforced and strengthened the legislation in the 1993 Statistics Act. See <https://www.cso.ie/en/aboutus/lgdp/cgt/externalgovernance/europeanstatisticalsystem/>

Hence in Ireland, the National Statistical System is now the framework being used by the NSB and CSO in setting out the national strategy for statistics and for planning its implementation. This new legal requirement covers: statistical programming and reporting; quality monitoring; methodology; data transmission; communication on ESS statistical actions and co-operation on statistical matters with the Central Bank. It means that all compilers must now follow the EU guidelines as set out by the CSO – thereby addressing formally (some thirty years later) the concerns expressed by John Blackwell at the 1985 Symposium.<sup>30</sup> A set of indicators of best practices and standards for each principle provides guidance and a reference for periodically assessing the implementation of the ES CoP through an increasingly robust peer review process.<sup>31</sup> Furthermore, the CSO is responsible for coordinating<sup>32</sup> activities and monitoring adherence to the guidelines, with the process itself being subject to Eurostat peer review on a regular basis.

The Global Financial Crisis (2007 – 2009) drew further attention to the limitations and weaknesses of the conceptual frameworks underpinning macroeconomic statistics and specifically the national accounts and balance of payments.<sup>33</sup> It became apparent that these frameworks would require major investment if they were to be able to measure accurately and consistently the complex world that has emerged with globalisation and the way in which modern businesses operate across borders. The scale of investment required makes it essential to have the involvement of international agencies, including Eurostat, the OECD and the UN (which is where the original macroeconomic statistical concepts were developed in the 1940s and 1950s). The direction of such developments will likely require increased data sharing across borders to take account of the greater complexity of business operations. Because of its exceptional level of globalisation, these developments are particularly important to Ireland and CSO statisticians are now actively engaged in this work. I return to this issue below.

*Domestic Developments:* Leveraging on the new powers and responsibilities embedded in European legislation, this decade saw the CSO engage in a very strategic way with Government Departments and with key agencies, such as the Ordnance Survey. This became possible because of the increased resources made available to the CSO and because of the decisions of Departments and Agencies to set up formal data infrastructures underpinned by policies, reflecting the public sector's wider engagement with the information society/economy. In this new environment, the CSO has been able to draw on a range of new data sources from which it could assemble and blend data to enhance the quality of statistics and the speed of their release. The development of a new website which was designed to facilitate data access as well as publish results allowed for a very significant increase in the potential for analysts and researchers to draw on datasets that were available electronically. Building on the transfer to the CSO of data sets previously collected by other bodies, e.g., the Business Expenditure on Research and Development and the Community Innovation Survey (which had been previously collected by Forfás), the CSO agreed in 2018 to take over from the ESRI the next phase of the Growing up in Ireland Survey.

#### **4. KEY INDICATORS OF PROGRESS IN THE DEVELOPMENT OF THE IRISH STATISTICAL SYSTEM**

This section looks briefly at how the issues raised in 1985 have been addressed in the period since then. It summarises the key changes, and then demonstrates how CSO resources have increased, allowing it to develop new outputs and means of accessing them. Finally, it looks briefly at the drivers of successful change in this period.

##### **Achievements since 1989**

Earlier in the paper I listed the main criticisms of Irish statistics that were identified at the Symposium in 1985 and echoed in Jerry Sexton's paper in 1989. While it took over a decade to begin to make serious progress on addressing these, change in the past 20 years has been exceptional and there is a continuing momentum in the development of the system.<sup>34</sup> For example, all of the issues identified in the papers by Denis Conniffe and John Blackwell have been comprehensively addressed, primarily due to the 1993 Statistics Act, to the drive of the NSB and CSO working in tandem, and to the CSO getting more resources. These have significantly improved availability of statistics, as Irish users now have similar data series available to those across the EU, and much greater data access through the website, research microdata files and to data in the ISSDA.

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<sup>30</sup> The CSO must also ensure the independence of all staff engaged in the compilation of European Statistics and that its own staff are recruited under transparent systems that embed professional skills in the selection criteria.

<sup>31</sup> A new round of peer reviews of statistics across the ESS is due to commence in 2020, and for the first time this review will cover all the national statistical institutes along with the statistical units in all other key producers of other national statistics.

<sup>32</sup> In effect the 2015 EU legislation means that the CSO must be consulted during the initial design, subsequent development and discontinuation of administrative records right across the public service.

<sup>33</sup> Irish statisticians have been at the forefront of discussions and developments in macroeconomic statistics over the past three decades, reflecting Ireland's being one of the most globalised countries in the world.

<sup>34</sup> The delay in implementation was primarily due to resource and organisational demands associated with the relocation of activities to Cork. This particularly delayed IT developments, with knock-on effects into the 2000s.

While more remains to be done in terms of coordination, quality control and integration to create a comprehensive national statistical system, there is now wider appreciation of the need for, and benefits of, such progress within the public sector. The area where progress has been slowest has been in the creation of unique identifiers for Government administrative purposes, where Ireland has lagged significantly behind most EU countries. Recently there has been significant progress in relation to individual identifiers, through the use of the PPS number, but progress remains slow in relation to spatial identifiers. This delay poses a major limitation to measuring the impact of policies and practices (e.g. the absence of the health identifier in measuring patient outcomes and calculating health-system efficiencies in different areas) and in understanding overall regional differences (e.g., looking at the factors underpinning the concentration of poverty in specific areas).

### Resources for Statistics

As noted particular by Tom Linehan his 1985 and 1998 papers, the desirable developments in Irish statistics needed additional financial resources. The allocation of funds to the CSO for pay and pensions have grown very significantly; starting at €7.2m in 1989, they doubled in nominal terms by 1999, and they almost doubled again by 2004. As Table 1 shows, they have increased by over 40 percent since 2004, with their total share of exchequer pay and pensions increasing from 2.07 in 2004 to 2.24 in 2019.

**Table 1: CSO Pay and Pension Allocations and their share of Exchequer Pay and Pensions, 1989 – 2019 from Revised Estimates Volume**

Year	CSO pay allocation €m	Exchequer pay allocation €m	CSO % Share
1989	7.240	N/A	
1994	11.925	N/A	
1999	14.681	N/A	
2004	28.810	13,890.650	2.07
2009	38.736	18,332.738	2.11
2014	29.533	13,559.916	2.18
2019	40.635	18,104.461	2.24

Source: CSO Financial Section

These increases in resources are reflected in increases in staffing numbers in the grades at and above Statistician/Assistant Principal, as shown in Table 2. In the four years to January 2019, they increased by 55 percent, reflecting the need to re-profile statistical resources due to changing skill set requirements.

**Table 2: Growth in CSO Senior Resources 1995- 2019**

Date	Feb-95	Feb-00	Dec-04	Dec-09	Dec-14	Jan-19
Director General	1	1	1	1	1	1
Assistant Director General/Director	4	4	4	6	4	6
Senior Statistician/Principal Officer	13	13	21	24	20	32
Statistician	30	47	69	97	93	129
Assistant Principal	12	14	19	22	19	45
Total	60	79	114	150	137	213

Source: CSO Human Resources Section

While there is no publicly available data series for CSO human resources back to 1949, it is possible to estimate their levels at points in the period up to 2019, drawing on different reports by the CSO. What is evident from Table 3 is the significant increase in the number of statisticians and Assistant Principals following the period of entry into the EEC and the relatively small increase in the following 15 years. The transfer of the bulk of the activities of the CSO to Cork, which coincided with the growth in the demand for new statistical series in relation to the Single Market, saw the numbers more than doubling between 1990 and 2000, and the past six years have seen the number increase by over 55 percent.<sup>35</sup>

<sup>35</sup> While the transfer to Cork provided an opportunity to free up some of the statistical resources in Dublin for the development of economic statistics, the transfer placed huge pressure on the CSO to deliver on the growing requirements set by Eurostat.



**Table 3: Estimates of CSO Professional Staff Numbers 1949 - 2019 (various years)**

1949	6
1969	15
1975	25
1990	35
2000	79
2013	137
2019	213

*Source: Own estimates of numbers in positions of Statisticians/Assistance Principals and above from various CSO documents for 1949-1990 and from CSO HR from 1995-2019.*

### **Outputs and Access**

There is no simple method to demonstrate the increase in the outputs of the CSO and the access to statistics since 1989, as the scale of change is manifested in diverse ways: the increased numbers of data series released (filling in the gaps identified in the 1985 symposium), the depth and quality of those data series, the faster delivery of outputs as timeliness has improved, the delivery of special runs and research microdata files by the CSO to key users, and the general access to statistical outputs and data series on the CSO website.

The modernisation of the delivery of outputs means that some of the traditional CSO publications have ceased, being replaced by statistical releases with links to the relevant data series on the website. In effect, resources are now deployed in generating the 'soft data' with appropriate software instead of the publications,<sup>36</sup> leaving users to undertake their own analyses. Consequently, the releases are aimed at the wider public, while the data series prepared are intended for more specialist users. Whereas it took typically five years or more to process the full range of census data up to the end of the 1980s, the full range of census volumes are now released in the year after the Census is held. The number of statistical releases increased from 213 to 311 between 2013 and 2018, while the numbers of full publications hovered in the low 30s with higher numbers in 2017 reflecting the post-census publications.

The CSO has no time series on the increased use of its web site but rather maintains the data on a cumulative basis. It estimates that, since the establishment of the current website, there have been almost 1.4 million page views of its statistical releases and over 3.6 million page views of its publications.<sup>37</sup> The large number of release and publication page views shows the wider population engagement with official statistics, with the releases and publications from the *Census of Population* and the *Baby Names* having the larger numbers of hits.

And at the other end of the spectrum, there are now many users of Micro Data, access to which was possible since the mid 1990s, but for which numbers have only begun to grow in very recent times. This new growth reflects both a larger community of analysts and researchers in Ireland and the CSO's investment in secure methods for accessing anonymised research micro-data files (RMFs). Table 4 shows the increased number of files issued and the multiple users accessing them, along with the increased numbers of organisations whose analysts and researchers are now accessing the data. This increase reflects the access to economists and statisticians in government departments and is linked to the rebuilding of analytical resources in the civil service on foot on the establishment of the Irish Government Economic and Evaluation Service (IGEES).

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<sup>36</sup> Either in paper form or in downloadable PDFs

<sup>37</sup> These numbers cover the period up to April 2019.

**Table 4: Increased Access to/Use of CSO Anonymised Research Micro-data files.**

Year	RMFs Issued	No of People on the RMFs	No of Organisations
2009	25	61	14
2014	20	78	12
2015	28	109	16
2016	85	298	31
2017	143	419	50
2018	101	332	43

Source: CSO

### Drivers of Success

In reviewing progress, it is instructive to consider how this major change in Irish statistics has come about. Based on my regular contact with the Irish Statistical System since 1993, I think that the starting point was the quality and vision of the 1993 Statistics Act, which is regarded in an EU context as being a very strong piece of legislation. Central to that Act was clarity on the important role of official statistics and the independence of the CSO. With the establishment of the NSB, and its work alongside the CSO, came the adoption of a mission for Irish statistics that was transparent, values-driven and user-focused. ‘Increased use of statistics’ became a key NSB objective in the late 1990s, subject to strict confidentiality of the data being maintained.<sup>38</sup> Both CSO and NSB reports repeatedly emphasised the mission, which sat well in the overall reform process in the Irish civil service; this has become stronger since the Financial Crisis with much greater emphasis today on data, evidence and analysis. The CSO’s process of moving steadily forward ensured that there was no questioning of its independence or professionalism or authority, and the independent voice of the NSB has supported this.

As well as national governance and reform drivers, the changes also reflected the CSO engaging in major organisational reform which impacted every aspect of its work. In tandem with that reform, the CSO began to engage in cooperation and coordination actions with the wider civil and public service, enabled by the powers in the 1993 Statistics Act, and by engagements that drew support rather than resistance. Successful early joint activities with the Revenue Commissioners, and then with the Central Bank of Ireland and the Department of Employment and Social Protection, paved the way for the development of methods and protocols for these new relationships. In pursuing this direction, the CSO’s approach was closely aligned with the direction of travel elsewhere the European Statistical System, where increasing numbers of countries began to follow the Nordic models of making greater use of administrative record data. While this took resources in the short run, in the longer run it freed up resources to allow the CSO to undertake new activities. These included the growing number of secondments from the CSO to government departments with the establishment in 2017 of the Irish Government Statistical Service (IGSS), paralleling the IGEES for economists. The commitment to change of both the CSO and the NSB ensured that there was a momentum in place to allow CSO to help harness the willingness of the wider civil and public services to engage more proactively with building data strategies and improving the quality of their data.<sup>39</sup> Progress in relation to recent developments is set out in the NSB’s *Review of Statistical Priorities 2015-2020*, published in November 2018.<sup>40</sup>

This positive momentum is now fully reflected in the NSB’s current strategic goals for the Irish Statistical System, namely:

- The production of world class official statistics based on an Irish Statistical System comprising public sector administrative data and a comprehensive programme of surveys to support national user needs.
- The adoption and implementation of a national data infrastructure across the public sector, incorporating permanent unique identifiers and common data standards.
- Adoption of the Irish Statistical System Code of Practice by all producers of official statistics.

These goals provide a very strong starting point for looking at the next forty years, and are remarkably different from the implicit goals that would have been in place in 1989.

<sup>38</sup> This replaced the implicit focus in earlier times on confidentiality as the driving objective.

<sup>39</sup> The most up-to-date perspective on this is set out in Appendix 1, which lists some of the key documents which have contributed to this making these changes a reality.

<sup>40</sup> See [http://www.nsb.ie/media/nsbie/pdfdocs/Review\\_of\\_Strategic\\_Priorities\\_for\\_Official\\_Statistics\\_2015-2020.pdf](http://www.nsb.ie/media/nsbie/pdfdocs/Review_of_Strategic_Priorities_for_Official_Statistics_2015-2020.pdf)

## 5. THE NATIONAL STATISTICAL SYSTEM - BEYOND 2019

This final section of the paper covers three topics: elements of consumers' evolving demands for Irish official statistics, new possibilities in relation to producing Irish official statistics and the engagement of the Irish statistical system with Irish society.

### *Consumers' Evolving Data Demands*

At the end of his 1989 Presidential Address, Jerry Sexton identified three areas where there were significant gaps from a consumer/user perspective: service sector statistics; social statistics, and particularly household surveys;<sup>41</sup> and unemployment and employment statistics. The list reflects both the paucity of Irish data at the time and particularly the general dearth of social statistics in Ireland, as well as the author's own data interests. I note this not by way of criticism but to use it as a cue for pointing out how researchers' and analysts' perspectives on Irish official statistics usually reflect their own professional interests while the CSO and NSB have to manage the development of the entire system. This is one of the benefits of the 1993 Act giving the NSB, with its user focus, responsibility for prioritising developments across all possible needs identified by users.<sup>42</sup>

In 2019, there are several stand-out issues facing Irish statistics that have been identified through the most recent survey of Irish users and many of these are set out in the NSB's Strategic Priorities (2015), which summarises them as follows:

*Important gaps have emerged in the Irish statistical programme that the Board believes must be prioritised within the CSO's statistical programme. Specifically, Irish users consistently point to the need for more coherent health sector data, more information about energy and environment issues, better services data and the need for more detail in regional statistics. There is also a growing demand for new social indicators in the context of the increasing priority being given to well-being and social progress.*<sup>43</sup>

What is striking here is the absence of any reference to what is perhaps the biggest challenge facing Irish statistics, namely, globalisation, and its impact on our national accounts and balance of payments data. Perhaps there is a presumption on the part of the users surveyed that these matters are already dealt with through the CSO's engagement with Eurostat; the NSB estimates that meeting European requirements accounts for 90 percent of the agenda in the CSO. As noted above and in a variety of other documents,<sup>44</sup> the challenges with the macroeconomic data consequent on globalisation require a multi-country approach to resolve – major conceptual developments along with new data collection methods and data sharing. Globalisation disproportionately impacts on Irish data because of the scale of foreign direct investment, together with the associated outsourcing, offshoring and engagement in global value chains, as well as the scale of the activities in the Irish Financial Services Centre. Ireland has a particular interest in seeing the development of macroeconomic frameworks to deal with the impact of globalisation, and increasingly we see evidence of the global phenomenon impacting on other countries, albeit in a more modest way compared to what we experience in Ireland.

In addition to the topics referenced above, Ireland, in parallel with many other countries in Europe, needs to develop its statistical system to gain better insights into emigration and immigration and also to measure the economic and social integration of our new migrants. Such information also helps to provide data for estimating housing needs, alongside data from other sources on the quality of the housing stock. This links to the requirement for more environmental data already identified in the NSB report, along with area-based statistics and indicators.

As noted above, and as stressed by the NSB, the slow progress with getting unique identifiers for Ireland has seriously impeded the development of statistics for informing policy decisions and for policy evaluation. These identifiers could also assist in providing Ireland with cost-effective sources of longitudinal data sets.

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<sup>41</sup> At that point, apart from the five-yearly census, the only regular nation-wide household surveys were the annual labour force survey and the occasional household budget survey.

<sup>42</sup> Since the establishment of the NSB, there have been routinely surveys of users' needs, which are compiled for use in setting the priorities for statistical developments in Ireland.

<sup>43</sup> See [Sept 2015 - NSB Strategic Priorities for Official Statistics 2015-2020 'A World Class Statistical System for Ireland' \(PDF 3,949KB\)](#), Page 33.

<sup>44</sup> For example, the Report of the Economic Statistics Review Group published in December 2016: [https://www.cso.ie/en/media/csoie/newsevents/documents/reportoftheeconomicstatisticsreviewgroup/Economic\\_Statistics\\_Review\\_\(ESRG\)\\_Report\\_Dec\\_2016.pdf](https://www.cso.ie/en/media/csoie/newsevents/documents/reportoftheeconomicstatisticsreviewgroup/Economic_Statistics_Review_(ESRG)_Report_Dec_2016.pdf)

### ***Producers' New Possibilities***

In terms of producing official statistics, there is increased sharing of methodologies and potential sources among EU countries. For many countries a major issue is the amount of data in their national statistical systems that come from their ONAs. The challenge is to ensure that they are operating to the same quality and systems as the national offices (i.e., meeting the standards of the EU CoP) and that the data are being used and interpreted in a similar way. Given the costs of collecting data, the increased focus on using administrative records as a data source is now central to Eurostat's approach and centre stage for most NSIs, with the aim of freeing resources for more data linkage and to undertake more analysis of the data. Collecting data through on-line surveys is also now a plausible option and will be doubtlessly be under consideration in the methodologies for many surveys, including undertaking future Censuses of Population in Ireland.<sup>45</sup>

The issue of how GDPR will, if at all, impact on how the CSO and similar bodies in other countries operate has not yet been fully clarified. This will also come into play when looking at the potential for collecting data from private sources, such as data on tourism or data on capturing retail sales that do not come through traditional outlets. Drawing statistics from new sources, such as Big Data and administrative records, adds to the potential to have data sets, when combined with traditional survey data, that are richer and more timely.

This new opportunity also points to the need for official statisticians to be transparent and open about how they combine data, so that all users can have confidence in the continuity of data series and in the comparisons across different countries and regions. It also points to NSIs acquiring the requisite skills in data analytics and modelling to implement these new innovations. A further challenge for the CSO and its counterparts will be in attracting and retaining people with these relevant skills at a time when there is a great demand for data analysts particularly in the (higher-paying) private sector – this may delay the actual speed of implementation of recognised potentialities.

Finally, as well as the benefits of new sources of data, there may be a challenge to the role of official statistics from the owners of these new private sector data sources should they produce directly statistics for public use. These new data producers may have advantages over the CSO in the speed and cost at which they can produce statistics. At present, there are no standards for such statistics and it will be important that all producers of official statistics ensure that their quality is known and understood by users and that their statistical outputs enter the public domains in as timely a manner as possible.

### ***The NSS and Societal Engagement***

While there have been occasions where some have questioned the reliability and value of some CSO data over the years,<sup>46</sup> Irish official statistics remain highly trusted and regarded.<sup>47</sup> However, trust must not be presumed and the critical references to Ireland's macroeconomic data, and specifically the negative media coverage associated with the upward revision of the GDP growth rate to 26 per cent in 2015, need to be addressed.<sup>48</sup> CSO statisticians are to the forefront in research analysing the complex conceptual and measurement issues associated with globalisation and the CSO has produced several explanatory papers which are valuable to experts in this area. At the same time, the media and the public must be kept regularly informed, lest doubt be attached in any systemic way to our official statistics. The NSB and the CSO have recognised that this must be prioritised and, as noted above, Ireland is actively engaged in various international fora in efforts to develop macroeconomic statistics so that they can capture the many complex phenomena generated by globalisation. A combined international effort is required to address these complex conceptual and measurement issues and long delays in meeting these challenges successfully could serve to undermine belief in the value and relevance of official statistics internationally.

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<sup>45</sup> For example, a majority of countries will use sources outside of the traditional census itself to create their Census of Population statistics for 2021, and most EU countries anticipate that by 2031 there will no longer be a traditional census.

<sup>46</sup> As noted above, controversies like the *Black Hole* and the *Milk Levy* in the 1980s did lead some to question the CSO's methodologies, but there was no long-term impact on how official statistics were regarded. Rather, these events served to strengthen the case for having more resources to improve Irish statistics.

<sup>47</sup> For a much fuller discussion of the issues related to trust in statistics in Ireland, see the papers by Pádraig Dalton and Patricia O'Hara at the Society's Symposium in 2014 on 'Safeguarding Trust in Official Statistics': Dalton (2014), O'Hara (2014).

<sup>48</sup> To get a picture of the complexity of the issues involved, see, for example, The Report of the Economic Statistics Review Group (the Lane Report) in 2016 and the CSO's response to its main recommendations in 2017. [https://www.cso.ie/en/media/csoie/newsevents/documents/reportoftheeconomicstatisticsreviewgroup/Economic\\_Statistics\\_Review\\_\(ESRG\)\\_Report\\_Dec\\_2016.pdf](https://www.cso.ie/en/media/csoie/newsevents/documents/reportoftheeconomicstatisticsreviewgroup/Economic_Statistics_Review_(ESRG)_Report_Dec_2016.pdf) [https://www.cso.ie/en/media/csoie/newsevents/documents/reportoftheeconomicstatisticsreviewgroup/ESRG\\_CS\\_O\\_response\\_3\\_Feb\\_2017.pdf](https://www.cso.ie/en/media/csoie/newsevents/documents/reportoftheeconomicstatisticsreviewgroup/ESRG_CS_O_response_3_Feb_2017.pdf)

In the EU, the issue of fake facts is now on the agenda of both the European Commission and the European Statistics System Committee. It will be important for Irish democracy that we do not fall behind in dealing with the misuse of official statistics, if we are to recall the wisdom of what John Blackwell referenced in his 1985 paper, namely, that ‘information has been described as the currency of democracy’.

In Ireland, there is no charge of any political influence on the statistics process, for example, in terms of the timing of releases, the spinning of data or the leadership of the CSO. Notably, the Director General of the CSO is appointed for a fixed term (seven years) by the President of Ireland and the term of office is not impacted by a change in government.<sup>49</sup> Furthermore, the method of appointment is highly transparent, with the qualifications for appointment designed to ensure that the person chosen has the technical skills to have international status as an official statistician. In this regard, Ireland stands in contrast to the situation in several EU countries where appointments appear to be subject to political influence and where data release dates are not necessarily independently determined by the NSI.

In other countries, most notably the US, aspersions have been cast on the status of official statistics as being the independently and professionally generated best sets of measures. This points to the risk of allowing any decline in the high governance standards in the statistical system and any reduction in the professional standing or skills of official statisticians. There is also the issue of the misuse of official statistics in some countries (e.g., the UK ahead of the Brexit referendum) and consideration should be given as to how any such development would be handled by the CSO. This issue is also of EU-wide concern, especially with the growth of extremist groups which often criticise any statistics, including official statistics that do not align with their views.

All of these developments speak to the need for the CSO and the NSB to continue to improve engagement with civil society and to build statistical literacy in Ireland. This means the CSO continuing its efforts to develop infographics and other tools that are more accessible to non-experts and experts should recognise the strategic value of these developments. In their absence, individuals can more easily be misled by the misuse of official statistics, or become increasingly disconnected from the official measures of economic, social and environmental change. We should heed the warning, given to this Society in 1985 by John Blackwell, of the ‘danger that... the importance of statistics will be taken as self-evident’ by those working routinely with official statistics. We would ignore this warning at our peril, and it serves to remind us why the CSO must provide statistical services for all of Irish society and not restrict its focus to those of us here this evening.

## 6. CONCLUDING THOUGHTS

In conclusion, I hope that I have shown in this paper the extent to which the Irish Statistical System has improved since its difficult period in the 1980s. The progress made is a credit to all of those who have contributed to these developments – it is a strong example of successful change in the Irish public service. However, while recognising the great progress made, we must not be complacent at this crucial point in world history where fake facts are widely in circulation and where official statistics are at risk of being undermined. In Ireland, the work of the CSO and the NSB in evolving and improving the statistical system must be supported to retain the strong independent roles they have today and to continue meet Ireland’s statistical needs into the future and contribute to the development of a stronger European Statistical System. Perhaps a review of progress will make an interesting topic for an address to the Society some thirty years from now, by which time we will hopefully see official statistics across the world providing a strong pillar to supports democracy. At an EU level, it will be interesting for future statisticians to see how the position of Eurostat changes in the years ahead - whether it becomes more independent of the European Commission – more akin to the ECB than to that of a Commission DG.

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<sup>49</sup> In other words, this is not a position which changes when the government changes. In 2019, Pádraig Dalton was reappointed by the President of Ireland for a further five years.

## APPENDIX 1

Examples of the strategy documents used to promote change

### NSB Strategy Documents

- [Sept 2015 - NSB Strategic Priorities for Official Statistics 2015-2020 'A World Class Statistical System for Ireland' \(PDF 3,949KB\)](#)
- [Nov 2009 - NSB Strategy for Statistics 2009-2014 \(PDF 359KB\)](#)
- [July 2003 - NSB Strategy for Statistics 2003-2008 \(PDF 347KB\)](#)
- [Sept 1998 - NSB Strategy for Statistics 1998-2002 \(PDF 353KB\)](#)
- **Progress Reports on the Implementation of Strategy for Statistics 2015 - 2020**
- [Review of Strategic Priorities for Official Statistics 2015-2020 \(PDF 839KB\)](#) – November 2018
- **Progress Reports on the Implementation of Strategy for Statistics 2009 -2014**
- [NSB Strategy for Statistics 2009 - 2014 Mid Term Review\(PDF 285KB\)](#)
- **Progress Reports on the Implementation of Strategy for Statistics 2003-2008**
- [January 2007 - Progress Report 2003-2008 \(PDF 216KB\)](#)
- **Progress Reports on the Implementation of Strategy for Statistics 1998- 2002**

### Other NSB Publications

- [The Irish Statistical System: The Way Forward and Joined Up Government needs Joined Up Data \(PDF 150KB\)](#) (January 2012)
- [Survey of CSO Users 2006 \(PDF 455KB\)](#) (January 2007)
- [Statistical and Policy Value of Postcodes](#) (November 2005)
- [Policy Needs for Statistical Data on Enterprises \(PDF 277KB\)](#) (November 2005)
- [CSO Data Protocol](#) (May 2005)
- [Data Strategy Guidelines \(PDF 129KB\)](#) (April 2004)
- [An Examination of Data Holdings in Six Government Departments \(PDF 528KB\)](#) (September 2003)
- [Developing Irish Social and Equality Statistics to Meet Policy Needs \(PDF 398KB\)](#) (April 2003)
- [Survey of CSO Users 2002 \(PDF 370KB\)](#) (January 2003)

## APPENDIX 2

The Vision, Mission and Values of the Irish Statistical System as set out in the 2015 NSB Strategy Document are as follows:

### Vision

- A world-class system of official statistics using the best available data to provide high-quality, independent and accessible information for Ireland.

### Mission

- To promote and protect the independence, accessibility and quality of Irish official statistics.
- To promote and encourage the use of administrative data for official statistics in Ireland.
- To encourage the producers of official statistics in Ireland to adopt the Irish Statistical System Code of Practice.

### Values

- A strong commitment to the independence, objectivity and quality of Irish official statistics
- A belief in the importance of a system of official statistics that is flexible in meeting the needs of users
- The recognition of data protection, security and confidentiality as the basis for trust in official statistics

**Source:** National Statistics Board: A World Class Statistical System for Ireland: Strategic Priorities for Official Statistics 2015-2020, September 2015. [http://www.nsb.ie/media/nsbic/pdfdocs/NSB\\_Strategy\\_2015-2020.pdf](http://www.nsb.ie/media/nsbic/pdfdocs/NSB_Strategy_2015-2020.pdf)

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## DISCUSSION

**Bill Keating:** I would like to congratulate the President for an excellent overview of the way the official statistics have evolved over the past thirty years. She is perfectly correct to stress the importance of the EU in terms of its influence on the provision of resources for statistics.

On the economic side, where I was involved for much of my career, the arrival of the euro generated further momentum. We weren't at the time perhaps fully conscious of the value of some of the additional data we were obliged to compile. For example, the much greater amount of detail required for Balance of Payments tended to be regarded as mainly for input to overall Euro area tables. Of course we realised at a later stage that our own data in this field was giving signals of problems ahead.

The EU input was important but also had a downside. In national accounts, and especially as regards government debt and deficit, the rules began to assume the status of a legal text. This was positive in that politicians came to realise the importance of good statistics but some also began to question whether matters of such importance to governments should be left to statisticians. I can recall in a role I had in Europe at the time having to defend the role of statisticians in this regard. The fact that debt and deficit measurement was of such concern to governments has led to them, in some cases, designing schemes around the statistical guidelines.

The President has also mentioned the difficulty in estimating the quantum of output from CSO and other statistical agencies. I would add that improvements in quality also add to any measure of output and I would be quite happy that the quality of economic data has improved considerably over the period in question. Again the influence of the EU and its monitoring of measures such as GNI which is used for administrative purposes has been positive."

**Eithne Fitzgerald:** Frances spoke about changes in resource inputs and in statistical outputs. It's important also to consider outcomes, in terms of how well the production of statistical outputs have helped inform policy. The Department of Social Protection has been a leader in drawing on its own wealth of administrative data to inform policy-making, and in pooling their own data with other sources through data matching exercises with CSO and external administrative sources of data.

Producing adequate statistical information to inform health and social care policy has been much more challenging. One factor has been the delivery of so much of our health and social care system by s.38 and s.39 bodies, each with their own data system, accounts system, and ways of categorising information, so that it is difficult to obtain aggregated data across a range of important variables. The delays in providing a single health identifier, producing health data for individuals and identifying any double counting (for example in waiting list information) has also been a difficulty.

The CSO could play a useful role in supporting the health and social care sector around a suite of agreed descriptions and vocabulary for administrative, financial and performance data produced by the HSE and its

funded s 38 and s 39 bodies, to facilitate the generation of useful aggregate data for policy from administrative sources. The work of the Health Research Board's disability databases, and in particular the new National Ability Supports System which will provide an integrated dataset spanning physical and sensory disability, intellectual disability and autism, is an example of generating harmonised data across a range of different providers.

The special modules tacked on to the Quarterly National Household Survey have been a valuable innovation, and an important source of social statistics. Here, Eurostat has been a constraint on using this facility to the maximum, as often the need to conduct Eurostat-mandated modules has frozen out the capacity to undertake modules of specific Irish policy interest.

Frances's paper commended the increase in access by the CSO to microdata for specialised research. I would also like to commend their production of so much data through the Statbank in user-friendly excel or cvs formats for more simple analysis, as well as the willingness of the CSO to run special cross-tabulations that are of interest to particular users, and to publish the results of these special runs on its website for the benefit of other users.

Finally, I whole-heartedly welcome the production of pictorial and other popular presentations of CSO data for a wider audience. Article 31 of the UN Convention on the Rights of Persons with Disabilities deals with statistics and data collection to inform policy, to identify barriers facing people with disabilities, and to assess progress in compliance with the Convention. It specifically provides that States Parties shall assume responsibility for the dissemination of these statistics, and shall ensure their accessibility to persons with disabilities and others. So 'pictures for those who can't read' is an important part of public dissemination, particularly for people whose disabilities may make conventional statistical products inaccessible.

**John Fitzgerald:** This paper makes a very valuable contribution to our understanding of official statistics in Ireland, how they have developed and also on what the priorities are for the future. The author herself has made a significant contribution during her time chairing the National Statistics Board.

In her paper the author suggests that, wherever possible, it can be very useful to learn from experience in other countries on how best to develop official statistics. The institutionalised co-operation through the EU has been a very significant help in developing a robust and useful statistical system for Ireland. However, there are some areas where Ireland has to take the lead rather than copy best practise elsewhere.

A key area for Ireland is the measurement and understanding of the contribution to the economy from the operations of foreign multi-national enterprises (MNEs). Developments in recent years have meant that the national accounts are no longer a good guide to what is going on in the macro-economy. While work is being done to develop satellite accounts that will meet the needs of policy makers, we are some way from seeing the fruition of these labours.

However, at a conference last year in Washington, attended by many staff from the US Bureau of Economic Analysis, Eurostat, the IMF and the UN, it became clear to me that, because of their pioneering work on the national accounts, the CSO is highly respected internationally. Perforce, because we face such problems in developing useful supplements to the national accounting framework, the CSO must lead, rather than follow. Already the CSO have developed a very useful measure – the adjusted balance of payments on current account. The complexity of this problem has been brought home to me as Chair of the Climate Change Advisory Council. While the Economic Statistics Review Group reported in 2016 suggesting the development of satellite national accounts to meet the needs of policy makers, this Group did not consider the needs of environmental policy. In fact, additional development will be needed if we are to be able to model the trajectory of Irish greenhouse gas emissions and to develop appropriate policies to decarbonise the economy at minimum cost.

The growing use of administrative records, presaged at a 1985 SSISI symposium, is greatly adding to our understanding of the economy. It also reduces the cost of providing this information. While as a researcher I have been concerned at the slow pace of this development, it is essential that the increasing use of these data sources protects the data on individuals and companies. If there were any leak of information on an individual this would compromise all the progress made. The fact that no such problems have occurred is a tribute to the CSO methodical approach.

However, it is important that the CSO continues to use its powers to develop these data and to make them available, with suitable safeguards, for research purposes. There have been concerns in the research community that there has been some reversal of trends on access. It is essential that the progress of the last decade in facilitating research is maintained in the next decade.



The experience of the wider public in accessing the 1901 and 1911 Censuses has highlighted the value for the wider public of having good statistical information, not just for today, but also for the past.

The CSO have done a very good job in developing their website. As an everyday user of the site to access a wide range of data, I appreciate the fact that it is much easier to use than other comparable sites such as the UK ONS and the ECB. It is also far superior to the sites of the Departments of Finance and Public Expenditure and Reform and other government Departments. It would be much better if these departments either emulated the CSO's approach, or else got the CSO to host their data.

While top of the class on making data available on their web site, there is still room for the CSO to improve. While they have begun to archive data from past releases this has not been done on a consistent basis. For example, in understanding the performance of the economy it is necessary to know the data available to policy-makers at the time they made their decisions. However, the CSO generally only make available online the latest series incorporating revisions.

Also, until recently when series are rebased or revised they may not maintain the old series online. There are a lot of datasets that I downloaded around 15 years ago (with series going back to 1970) that I still have, but which are not now accessible on the CSO web site. These problems should be reasonably easily addressed.

In the 1950s the first Director of the CSO published a number of very valuable papers using the data that the CSO was collecting. This practise has continued on a sporadic basis, in particular with very useful papers to this society on demographic topics. I would encourage the CSO to continue this practise. It is good for the wider policy-making community but it is also good for CSO staff to use their talents in this way. Obviously this should not be the primary work of CSO statisticians. However, if they sometimes co-operated with outside researchers to do research papers this combination could prove to be very productive for all concerned.

Finally, can I congratulate the outgoing President of the Society on her Presidential address and thank her for her stewardship of the Society over the last 3 years.

**Patrick Honohan:** Thank you for this very stimulating Presidential Address which prompts me to make three observations. First, I can confirm your suspicion that Garret FitzGerald was indeed an enthusiastic force behind the institutional reforms that began in the mid-1980s. To be sure, this was a natural sphere of activity for him as the Department of the Taoiseach was the sponsoring Department of the CSO, and so he did not have to cajole any other Minister into taking action. In addition to the specific data issues around the so-called "black hole" in the balance of payments and the milk super-levy, I think the perception that delays in the timeliness of some official series was an important factor in motivating action. The delays may have been attributed to a degree of perfectionism at the top of the CSO, but it is worth remembering that the reforms did not bring political interference into the publication of statistics. Indeed, the Government's proposals at that time envisaged a strengthening of the independence of the CSO. Garret FitzGerald was so concerned that improvements in the arrangements for official statistics would not trigger politicization that, as I recall, there were discussions with the leader of the opposition, Charles J. Haughey, to make sure that the Government's White Paper on the matter would not become a political football.

Second, I was struck by the data presented today which suggest that the expansion in staffing and in the use, for example, of micro statistics did not come very quickly after the mid-1980s, but seem to have happened more since the turn of the century. It would be interesting to probe this aspect further: was there really this time-lag, or does it just reflect the particular choice of series made to illustrate the changes.

Turning finally to the new challenges which present the official statistician, it is evident that in our society we have more data than could ever have been imagined thirty years ago. But there are challenges in ensuring that this data availability is translated into useful public statistics. One problem relates to the adequacy of conceptual frameworks. Changes in the structure of the economy, related to technology and globalization in particular, have undermined the usefulness of such conceptual frameworks as the System of National Accounts. We realize this acutely in Ireland in relation to the operations of multinational corporations, but this is only one example of problems that are worldwide and apply to many sectors and aspects of modern society. With weak or broken conceptual frameworks, there has been a tendency to turn to simplistic and potentially misleading indicators of trends in fashionable dimensions of societal change.

A relatively small part of the flood of new data finds its way to the public statistician. While “big tech” firms gather impressive amounts of data in an impressively purposeful way, the public statistician can seem like a poor relation. There are many constraints, not all of them budgetary. For example, data from administrative records is a vital source, but can be compromised and biased by the way in which administrative rules lead to behavioural responses from households and businesses with the goal of minimizing taxation or maximising access to public services. Merging and collating different administrative sources (including across borders) is often hampered by lack of harmonization of the basic data.

Ensuring that society as a whole benefits from the explosion of data will be an important challenge in a number of dimensions of which the production and consumption of official statistics will be one of the more important.