



Evaluating the efficacy of UEFA's home-grown rule in European football

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Evaluating the efficacy of UEFA's home-grown rule in European football

Steven John Bullough

*Published works submitted in partial fulfilment of the requirements of
Sheffield Hallam University for the degree of Doctor of Philosophy
on the basis of published work.*

November 2021

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LIST OF PUBLISHED WORKS

1. Bullough, S.J. and Mills, A. (2014) Give us a game: Evaluating the opportunities that exist for English footballers to play in the English Premier League. *International Journal of Sport Science and Coaching*, Vol. 9, No. 4. <https://doi.org/10.1260/1747-9541.9.4.637>
2. Bullough, S. Moore, R. Goldsmith, S. Edmondson, L. (2016) Player migration and opportunity: Examining the efficacy of the UEFA home-grown rule in six European football leagues. *International Journal of Sports Science & Coaching*, Vol 11, Issue 5, pp. 662 – 672. <https://doi.org/10.1177/1747954116667104>
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Written in memory of Rob.

ABSTRACT

Professional football epitomises a truly globalised industry, with significant investment and attention afforded to the elite game, particularly in Europe which is the financial epicentre. There has been a significant increase in the migration of players from across the world following the 1995 Bosman ruling and subsequent relaxing of quotas. This resulted in legislation and regulations being introduced in Europe through UEFA, the governing body, to protect the development of home-grown players, without contravening the EU Commission's freedom of movement laws. This programme of research investigates the efficacy of UEFA's intervention by quantifying the way clubs (and National Associations) responded to the rule and assesses the design of the regulations using programme theory. The research focusses on quantitative analysis and utilises a combination of secondary data sources to collect statistics across six European countries (England, France, Germany, Italy, Netherlands, Spain). The findings outline the clear differences in the volume and 'quality' of playing opportunities for home-grown players between nations. These differences are visible between club types (size, wealth, success/standing) and different club cultures (e.g., philosophy). The structural differences between nations (domestic leagues allowing second teams) also influences the process of transitioning young players and the volume of playing opportunities generated. UEFA's home-grown rule has not abated such differences. The construction and imposition of UEFA's home-grown regulations had a limited theory of change underpinning it and the design could be criticised for (1) focussing on outputs not the process and (2) not controlling dominant variables. The research has practical implications for UEFA in the future as the governing body charged with creating, designing, and implementing regulations to protect home-grown player opportunities. The recommendations outline the need to implement a clear theory of change for any future interventions by UEFA to better understand the relationship between inputs, actions, outputs, and outcomes.

1. INTRODUCTION

This commentary brings together a programme of research around the development of players in European football, which began in 2012. The five research articles published from this programme of research are taken from four internationally peer-reviewed journals and form a coherent portfolio of work which appraises the design of governing body legislation. The body of work provides insight and observation which is well-positioned to positively influence future legislation in player development in elite men's football. The commentary is structured as follows:

1. Aim and research agenda: to outline the aim and coherence of the research programme.
2. Context and link to literature: to position the collection of work in the context of contemporary literature in academia.
3. Conceptual Framework: Theory of Change and its application in this research.
4. Methodological Considerations: to outline the research philosophy, discuss the methodological approach and the development of the method.
5. Contribution to knowledge: to demonstrate how the programme has contributed to knowledge, and its relevance to industry.
6. Future direction: to identify the gaps in current processes and suggestions for improvement in future research.

The papers used to produce this body of work have been retrospectively selected as part of a coherent portfolio of inquiry that allows analysis of the efficacy of the home-grown legislation in elite European football and the issues within the design of the legislative intervention. This adds to the coherent and substantial breadth of academic literature in professional football, which contemplates the concepts and relationships between different facets of the game (e.g., coaching, science, socio-cultural, economics, finance). The level of understanding examining the efficacy of major legislation (in an area that is a core principle of UEFA's mission as the European Governing Body) is an area which has not been investigated as broadly. As a result of this gap in the literature, this collection of published work outlines key findings around the clubs' response to the home-grown legislation and an appraisal of its efficacy. Each paper, in turn, has taken the findings and learning from its predecessors to construct additional areas of inquiry.

2. AIM AND RESEARCH AGENDA

The main aim of this commentary is to contribute to the understanding of how the design of a direct intervention by UEFA in youth development via the home-grown rule has impacted on playing opportunities in the six main European leagues, to advance knowledge in this area and inform the design of future interventions. A supplementary aim is to create knowledge around the efficacy of legislative intervention, notably how such legislation is interpreted and adopted by the stakeholders tasked with responding to the new rules around the inclusion of home-grown player quotas. A key research question to assess efficacy, therefore, is examining whether UEFA's intervention has created any additionality in elite European football over and above what would have taken place anyway? The broad objectives of the research are:

- To quantify playing opportunity data in greater depth than previous academic research.
- To develop the metrics used to assess player development and opportunity.
- To critically analyse the design of the home-grown rule using Theory of Change (ToC).

Research undertaken in professional football has been prominent since the early work in the 1950s and 1960s and has spanned areas including sport science, coaching, society, and culture. The formative research in the area of player development in football has led to academic progression in the understanding of various scientific aspects such as physiology, injury, motor skills (Reilly and Thomas, 1976; Drust and Green, 2013), psychology of players (Gould, 1982; Feltz and Brown, 1984), the cultural perspective (Ronen and Shenkar, 1985; Webb and Thelwell, 2015), coaching/tactical perspectives (Wright et al, 2013; Hardman and Jones, 2007), and technological advances (Asai et al, 1998; Choppin, 2013). As the game has become more global (McGovern, 2002; Richardson et al, 2012), research in areas such as labour/migration, legislation, organisational philosophy, finance, and business/management principles specifically applied to football have developed since some of the early work (e.g., Sloane, 1969; Sutherland, 1988).

Much of the early work assessing the globalisation of football before and since the Bosman ruling in 1995 addressed issues around free market forces, adherence to EU laws (anti-discrimination based on nationality, labour, freedom of movement) the role of migration, and economic/labour theory (e.g., Jones and Chappell, 1997; Maguire and Stead, 1998). The environment and process for player development is an area that has developed more significantly in the last two decades (Williams and Reilly, 2000; Relvas et al 2010, Mills et al 2012), alongside the financial and commercial aspects of the game (e.g., Solberg and Gratton, 2004; Hamil and Walters, 2010; Plumley et al, 2020). Research has shown that there are some clear similarities in the structure and governance of European football

leagues (e.g., National Association role, structure of the leagues, qualification to European competitions, calendars, revenue generation sources, etc.). It is also clear that each club/nation has its own subtleties in their structure and sub-cultures which influence the way they operate, and the behaviours and strategies exhibited towards player development.

This research programme applies a ToC framework *ex post* (after the fact), to retrospectively assess the design of home-grown rule against the aims, objectives and intended outcomes of UEFA's intervention to improve player development in European football. Two fundamental elements exist at the outset of a change programme. First, a need for something to be done differently has been identified and, second, a mechanism for implementing change has been devised (Oswick and Grant, 1996), be it behaviour, culture, structure, process, inputs, activities, outcomes, or a combination of all these aspects. A process of change had been implemented by UEFA after identifying an issue with developing home-grown players (UEFA, 2005). However, it appeared the mechanism for change was designed without any consideration of how achieving a positive change in this area could occur in the environment of professional football or creating a tracking system/database to monitor changes.

Drucker (1954), a management philosopher, highlighted how organisations needed access to accurate databases and quality improvement processes to develop and meet goals. Ridgeway (1956) also outlined resources can be managed more rationally if the progress towards meeting goals can be measured. However, contrasting ideas outline how introducing measurements into a system can result in those being measured simply changing their behaviour in alignment with the measures being observed (e.g., the 'reactivity of measurement' concept, French and Sutton, 2010). Manheim (2018) outlined that when metrics are applied within a system naively it can distort behaviour and structure, which can subsequently undermine the original objective of their introduction as participants try to exploit the metrics. He argues that to build better metrics, they must be (1) specified more closely to the true goals and (2) prevent gaming of the system. This research programme analysed how elite European clubs responded to the introduction of compulsory metrics via the home-grown rule quotas. The next section describes the development of the research programme.

2.1 Development of the research programme

It became clear in the early part of the research programme that to be able to make any recommendations, the methods employed required a different approach to what previous research had used. For the research to make an objective and critical appraisal of the reaction of clubs and associations to the legislation, the variables included, the sub-categories created, and the geographical scope had to widen.

Early research in player development had begun to formulate research questions and develop methods and metrics which aimed to quantify player opportunity linked to player migration and opportunity in English football post-Bosman (e.g., Littlewood et al, 2001; Magee and Sugden, 2002). The early methods used to measure opportunities by nationality employed relatively basic metrics to quantify the number of players in a squad (e.g., McGovern, 2002), then the number of players as a percentage of the starting eleven (Gratton and Solberg, 2007). These studies demonstrated that there was an inherent value in quantifying playing data to inform our understanding of migration and opportunity in professional football. However, the level of insight, range of variables and the depth of the analysis around the implications from the early research required strengthening to assess the efficacy of UEFA's legislation in influencing the strategy and operation of organisations in elite European clubs. The initial research at National Association level also took a very narrow view, in terms of the timeframe (years included) or number of nations included (e.g., Poli, 2009; Smokvina, 2013). Early research also did not directly look at the efficacy of the rule from a longitudinal perspective or aim to create metrics to allow greater depth of analysis to meet the gap in research.

This research began with an examination of the level of opportunity in relation to senior appearances by English players [REF-1], and then extended the variables used (minutes) and the geographical scope to six leagues [REF-2]. The research developed further by creating variables which enabled the data to examine where each player developed (academy) and where they played professionally (creating a 'player pathway passport') using England as the example [REF-3]. The addition of the Champions League, in REF-4 (financial information and participation) is an important part of the context as (1) Champions League revenue is a significant 'input' when assessing player recruitment and development strategies in relation to ToC, (2) Champions League participation is a measure for the volume of playing opportunities at the highest level in European club football and (3) addressing the balance of competition in the Champions League was cited as one of the four aims of the home-grown rule. The final development applied the additional variables, geographical scope, and timeframe to a larger sample, analysing a 16-year period from six European leagues [REF-5]. This created a database which amassed 1,840 squads and 13,332 different players from 144 nationalities. Collectively, the research programme allows critical reflection on the home-grown rule and demonstrates how development of the methods employed has extended the knowledge base in this area of work beyond the early studies. Figure 1 summarises the theme of each paper included in the research programme.

Figure 1 The development of the research programme through the individual papers



The secondary data collected and analysed in all five papers is quantitative in nature and was accumulated through obtaining the playing statistics by eligible season for each club and player and background information on individuals' academy pathway. These were used to calculate relevant performance-related outputs. By REF-5 the variables included player name, academy attended, club played for, appearances, minutes, season played, league played in, international experience (youth and senior), plus financial data from UEFA's annual reports on Champions League revenue distribution [REF-4]. Additional sub-groups were created based on traits (e.g., ever-present top-flight clubs). Ridgeway (1956, pp 240) argued that to analyse the impact of performance measurements they fall into either "(1) single criteria (when one quantity is observed and measured), (2) multiple criteria, where several variables are measured and observed and (3) composite criteria, where separate variables' quantity is weighted and then added or averaged". The early work by others in this area focussed on single criteria, and this research developed the analysis using a multiple criteria perspective.

The next section outlines the policy context of the topic and discusses where this research programme fits. The critical discussion that follows this section does not aim to duplicate findings from individual contributions but position the research programme alongside contemporary academic work and industry context. Detailed results and examples can be accessed through the publications cited at the outset of this document, and their contribution to knowledge is discussed from a more holistic position in the latter sections of this critical appraisal.

3. POLICY CONTEXT AND THE HOME-GROWN RULE

Since the 1990s, European football has been subject to three major pieces of legislation which have impacted clubs and league competitions, two of which were designed and imposed by UEFA as the governing body of the game in Europe. First came the Bosman ruling in 1995 (a European Court of Justice decision concerning freedom of movement for workers). This was followed by UEFA's

interventions via the home-grown rule (2006) and Financial Fair Play (FFP) in 2011, all three of which directly influence player development strategies and migration.

3.1 The 'Home-Grown' rule in summary

The Bosman ruling in 1995 was arguably the catalyst for the major changes football has seen in player development and migration (e.g., Simmons, 1997; Maguire and Pearton, 2000), and research in this area has developed since. The home-grown legislation was introduced for the 2006-07 season, primarily focussing on protecting the playing opportunities for young players by ensuring that a minimum number of players in each squad were home-grown. The rule was presented with the following aims (UEFA, 2005):

“(1) encourage the local training of young players, (2) increase the openness and fairness of European competitions, (3) counter the trend for hoarding players, (4) to try to re-establish a 'local' identity at clubs.”

The rule contains no conditions on nationality, to keep within EU law, and there is no obligation on clubs for the number of home-grown players on the field of play, or named on the match sheet (UEFA, 2005). Dalziel et al (2013) summarised the technicalities of the legislation, outlining how it was compliant with EU laws on economic activity and free movement under Article 45. This summary also highlighted key points including:

- UEFA acts as the collective regulator and their actions are subject to EU law.
- The home-grown rule is not inherently a need but considers sporting objectives of fairness and openness.
- It holds the status of 'indirect discrimination' as despite nationality being neutralised, migrant workers are disadvantaged.
- Competitive balance and training and development are both justifications but only some evidence is available of their merit.
- Increasing the number of home-grown players does not constitute a legitimate reason for free movement restrictions in EU law.

Since 2008-09, the Rule requires each team registering to enter any European competitions to formally list eight 'home grown' players in their permitted squad of 25, staggered from four players in 2006-07 and six in 2007-08. Of the eight players, four must be 'club-trained' and four must be 'association-trained'. Club-trained players are defined as those players registered with his current club for three entire seasons or 36 months between the ages of 15 and 21, either continuous or non-continuous, and this is irrespective of nationality. Association-trained players are required to meet

the same criteria as club trained players; however, this is achieved through their registration occurring with another club from the same National Association. UEFA aimed to enforce compliance by making the criteria a formal part of competition registration. If any club does not meet the conditions of registration, i.e., eight eligible players, they are required to reduce the number of players permitted on their 'A' list by the number of home-grown players they are short. Any ineligible players named in a squad in a position reserved for a home-grown player will not be eligible to play or be replaced.

Financial Fair Play was implemented in 2011-12 with an aim to prevent professional football clubs from overspending (in relation to their earnings) thus avoiding financial problems in the long-term (Plumley et al, 2020). Although the design of this legislation is not a focal point of this research programme, from a ToC perspective, inputs are a focal point as they drive activities. The financial 'inputs' available to European clubs is very different (and includes remuneration from UEFA through qualifying for their competitions, the Champions League and Europa League) and dictates behaviour and strategy of clubs. In addition, National Associations have their own financial regulation rules to adhere to e.g. The Premier League Profitability and Sustainability rules, all of which influence the behaviour and cultures adopted for player development, recruitment, and the provision of playing opportunities.

4. CONCEPTUAL FRAMEWORK: THEORY OF CHANGE

The basic principles of measuring change can be traced back through physics and scientific discovery, before greater understanding of change in relation to the social sciences emerged around human behaviour, organisations, and structures. For example, the 'Uncertainty Principle' in physics identified by Heisenberg in 1927 outlined that the act of measurement always disturbs the object being measured. A basic principle about measuring change is, therefore, that to enable measurement, something must be changed first. With more of a social science focus, work presented around change outlines the role of measurement in a change process. The management philosopher Drucker (1954) put forward the notion that if something cannot be measured, then it cannot be improved. Drucker argued the need for accurate databases and processes for quality improvement, bringing the measurement of change to the forefront of the process. However, when observing measurements involving human participants, it is likely that the activities observed because of a change may become focussed on the metrics which are to be measured (Manheim, 2018). Campbell (1979) found that in the social sciences, introducing metrics can distort the behaviour of participants who then try to exploit those metrics. Manheim, when paraphrasing the work of Campbell (1979) and Goodhart (1975), noted the theory of 'Goodhart's Law' which suggests that when a measure becomes a target

it is no longer a good measure. The notion of metrics and measurement are an important consideration in assessing the efficacy of the home-grown rule.

The concept of a 'Theory of Change' is one aspect of the wider notion of 'change' in an organisational and management perspective. Reinholz and Andrews (2020) outlined how it became prominent in the 1990's as part of theory driven evaluation, which moved thinking away from input-output evaluation to a more explicit explanation of how programmes are expected to operate, and explicitly stating the underlying assumptions. The benefits of this are that evaluators are better equipped to understand (1) what is being implemented (2) why it is being implemented (3) the connections between intervention and outcomes and (4) how to interrogate, assess and revise programmes.

Programme theory is a process that can be used to apply a ToC to evaluate complicated or complex aspects of programmes (Rogers, 2008). It is an approach which allows the explanation of how an intervention (such as policies, projects, strategies, rules etc.) contributes to the generation of outputs that results in outcomes and impacts, which can be positive, negative, intended, and unintended. Arensman et al (2018) outline that ToC has been accepted as an appropriate tool to use when evaluating the effectiveness of complex interventions. Theory of change is widely used in different sectors as a tool for planning and evaluation, particularly around assessing quality management (Brackenridge et al, 2011). It is also accepted that logic models, which illustrate the underlying assumptions of an intervention and the predicted outcomes, are an appropriate tool to articulate expected change.

Weiss (1997) described how ToC originated as an approach to understand interventions and how they work through the exploration of assumptions and processes which contribute to change. Making the link between an interventions primary aim and the strategies, outputs, outcomes, and activities which support this aim underpins this approach (Arensman et al, 2018). The application of a ToC articulates how programme inputs (e.g., finances, specific activities, and support) will be allocated or used to generate the desired outputs and outcomes defined as the expected results (Weed, 2014). Stein and Valters (2012), describing previous work, suggested that a ToC provides a roadmap or blueprint to make connections between activities and outcomes. Arensman et al (2018) suggest that a ToC can be produced 'before the event' (for strategy development and planning), and 'after the fact', as a method of evaluation.

The process of player development in professional football was established before UEFA's intervention; however, the data concerning the conversion and transition of academy players was limited and excluded important variables and detail (e.g., playing data, and pathways taken) and had

not been analysed in-depth. As Weed (2014) outlined, it is vital to question whether any positive change (additionality) in a system has occurred from the investment (of time and effort) as a result an intervention, or whether it is something that would have taken place anyway. A key research question to assess efficacy, therefore, is examining whether UEFA's intervention has created any additionality in elite European football over and above what would have taken place anyway? The research assesses the introduction of the new regulations using a ToC to explicitly articulate the stated outcomes and the process from which any changes can be traced.

It is important to consider other theoretical frameworks which could have been used to bring this programme of research together to form part of the critical appraisal of the work. Within the structure of professional football, there are existing relationships between key stakeholders (managers, agents, owners) due to the fluid patterns of movement, and this can influence player migration and development (see Widdop et al, 2016; Parnell et al, 2021). Network analysis, therefore, was considered as an option to underpin this programme of research, however, the data collected was not designed to include the depth of variables required to use this. The data collected and analysed in this programme of work acts as the building blocks from which more granular analysis from a network perspective could be achieved, i.e. establishing the patterns, without being able to critically analyse the interactions using, for example, the nodes and ties method to assess networks (Vinuesa, 2016).

Framing the research through a sports governance perspective, where the concept of sport governance can act as a theoretical construct and positioning this research against the differences between dimensions e.g. organisational governance and systemic governance (Dowling et al, 2018) was also considered. However, as the programme of research does not include an analysis of governance per se, just one intervention made by a governing body, the theoretical approaches involved were less applicable without different methods being employed. From this perspective of additional methods, had a qualitative approach been utilised in the research, the analysis could have been discussed through the lens of a different framework. This programme of research, however, adopts ToC as the most appropriate framework to examine the efficacy of the home-grown intervention.

5. METHODOLOGICAL CONSIDERATIONS

5.1 Research paradigms

Literature around research methods in the social sciences can be broadly summarised into two main paradigms, interpretivist-oriented and positivism-oriented (see Gratton and Jones, 2014; Veal, 2006). The two main paradigms have contrasting ontological and epistemological assumptions, from which outlooks are adopted, and suitable methods applied (Slevitch, 2011; Henderson, 2011). These

assumptions and approaches underpin the ontology (what is reality) and epistemology (what is knowledge and how do we know this) from Crotty (1998). Marsh and Furlong (2002) discuss how researchers develop a position within their chosen field based upon their ontological and epistemological view of the world. Developing a defence of your world view is also an important journey for a researcher (Grix, 2002).

Ontology outlines how researchers believe things really are and how they work (Crotty, 1998). The ontological stance taken allows researchers to position their epistemological view, the theory of knowledge, in a logical manner. Positivism recognises that reality can be objective and identifiable whereas interpretivism understands that individuals can experience the same thing differently. Epistemologically, the positivist paradigm supports the notion that it is entirely possible to observe and measure human behaviour objectively, through the application of methods which can be applied to justify or forecast behaviour. Interpretivism, conversely, is a subjective paradigm and understands the world and the actions of those in it through a lens of emotions, thoughts, and feelings where the same experience can be experienced differently, as there is a level of dependency between the subject and object (McKenzie and Knipe, 2006).

There are implications for research design and data analysis between the different paradigms. Henderson (2011) argued that early research work in leisure studies traditionally followed either the principles of the interpretivism paradigm or the positivism paradigm, before the development (or shift) of a more pragmatic approach through a post-positivist paradigm. This can be applied when examining the complexities in the study of the social sciences. Post-positivism has created a challenge to how researchers discuss the truth around how knowledge is acquired (Phillips and Burbules, 2000). Post-positivism is a reformation of positivism, while still acknowledging that a form of reality exists based on probability instead of true certainty (Mir and Jain, 2017). As perception and observation is fundamentally imperfect, our constructions of it are also imperfect; therefore, objectivity for a post-positivist researcher is a characteristic that resides within their own self.

Henderson (2011) argues that post-positivism recognises the social sciences are fragmented, and that knowledge is constructed socially, particularly in leisure studies research, which fits the definition of pragmatism, a branch of post-positivism. Pragmatists and realists are fundamentally concerned about having 'correct' knowledge of the world. The notion of what constitutes a 'real world' has assumptions attached to it based on the stance of the researcher. Post-positivism assumes that truths are not black or white and can be objective without absolute certainty (Gratton and Jones, 2014). The researcher accepts that there are imperfections when interpreting what is truth.

The branch of epistemology identified as realism is also important to consider in this research, specifically critical realism. Realism has three epistemologies 'naïve', where things are as they appear, 'scientific', where scientific method represents the true world and 'critical' (Gray, 2013). Critical realism aims to distinguish between what is the 'observable' part of the world and what is 'real', under the assumption that it is not possible to observe the real world, as it is independent of human construction (Crotty, 1998), and complete truth is hard to achieve (Gray, 2013). Critical realism identifies that what we know is generated by what we can observe and experience. Critical realists also understand observable events to be caused by unobservable structures, and the world can be understood when the structures that produce unobservable events are understood.

5.2 Philosophical underpinnings of this research programme

Setting out the ontological position of the author allows the research programme and methods to be framed within their perspective of reality. A post-positivism approach adopts an ontological position which recognises that 'reality' can exist objectively, and an epistemological position which outlines that it is possible to observe and measure behaviour, where reality can be explained, and truth probably exists. Epistemologically, in the positivist paradigm, it is possible to observe and measure human behaviour using (mainly) quantitative data in an objective manner which can therefore explain behaviour and make forecasts for future behaviour. My ontological approach follows the thinking which underpins realism, whereby there is an independent, real world existing outside of the constructs of the mind where objects exist independently (Cohen et al., 2007). I also hold the belief that it is wholly possible to objectively observe events and actions in the real world and make records of those events. The post-positivism approach enables researchers to assume the probable causes of outcomes and attempt to identify and make assessments of the causes that affect outcomes (Phillips and Burbules, 2000). The basis of this research programme is from a post-positivism perspective, which influences the method used and the process of bringing the research together.

This method employed in this research is, therefore, quantitative in nature, as the assumptions made in the post-positivist world view align more closely with a quantitative method than qualitative (Creswell, 2009). Developing numeric measures of observations and studying behaviour becomes paramount for a postpositivist (Champ et al, 2019). This research collected data from observable events (e.g., the accumulation of individual player data) which were produced by unobservable structures (e.g., club culture/philosophy towards player development). Through the collection of relevant objective data, using interpretation which is subjective in nature and acknowledges this reality exists, this research is based on a position of probability rather than certainty (Howell, 2016).

This work is written from a critical realist perspective in the post-positivist paradigm, not seeking answers with universal truth.

In summary, the nature of the secondary analysis and subsequent interpretation emerges from a post-positivist standpoint, where subjective matters are discussed from which conclusions are drawn on the notion of probability, rather than true certainty. Each paper has, through an inductive process, developed the variables, timeframe and sample included to make greater connections— see Table 1. Collectively, it allows an assessment of the outcomes set out by UEFA in their rationale for the home-grown rule. Through a post-positivist perspective, quantifying outputs helps stakeholders to evaluate whether the rule has achieved its stated aims, identify, and discuss the probable causes, and sets the platform for future research – see section 8.

Table 1 Development of the methods through the outputs

| | REF-1 | REF-2 | REF-3 | REF-4 | REF-5 |
|------------------|---|--|--|--|--|
| Nations | 1 (England) | 6 (England, France, Germany, Italy, Netherlands, Spain) | 1 (England) | All 55 UEFA member nations | 6 (England, France, Germany, Italy, Netherlands, Spain) |
| Time frame | 20 seasons 1992/93- 2011/12 | 16 seasons 1999/2000- 2014/15 | 10 seasons 2005/06- 2015/16 | 15 seasons 2003/04- 2016/17 | 10 seasons 2005/06- 2015/16 |
| Competition | Domestic – top tier | Domestic – top tier | Domestic – top tier | European- wide (Champions League) | Domestic – top tier |
| Variables | Club, season, international caps, appearances | Club, season, international caps, league, age, appearances, minutes | Club, season, academy, age, international caps, age, appearances, minutes | Club, season, age, league, appearances, minutes, prize money, round reached | Club, season, academy, age, international caps, age, appearances, minutes |
| Data analysis | Secondary Aggregation, descriptive statistics, Z scores | Secondary Club typology, descriptive statistics, Z scores | Secondary Club typology, descriptive statistics, aggregation | Secondary Revenue aggregation, performance analysis | Secondary B teams, descriptive statistics, aggregation |

6. CONTRIBUTION TO KNOWLEDGE

The critical discussion centres on an assessment of the legislation's efficacy, its design and inclusion of specific limits (club and association expectations/anticipated behaviour). The first paper in the research programme sought to further the lack of empirical evidence in playing opportunity, and the subsequent papers have developed the methods to assess the efficacy of the legislation design. The main contribution to knowledge from this research programme relates to the identification and retrospective application of a conceptual framework (ToC) to enable UEFA to ascertain whether their stated outcomes were achieved and if so, whether they are attributable to their intervention. Without a ToC, it is difficult for UEFA to trace any positive outcomes back to their objectives and inputs, and attribute changes to the intervention.

The research programme argues that the design, construction, and imposition of UEFA's regulations could be criticised for (1) focussing on less relevant outputs (e.g., squad quotas not actual playing time, club and association trained) and not the process to improve player development; (2) a lack of control over the dominant variables (e.g., financial inputs, specified activities, protected time, infrastructure) linked to (3) no theory of change. The research programme has identified the following issues with the design of the home-grown rule.

(1) The measurements

- Unclear identification of the methods and metrics required to assess the efficacy of imposing quotas.
- Relevant outputs are not defined (e.g., imposing quotas for squad selection and not actual playing time) and all clubs regardless of context have the same quotas applied.
- No system to monitor outputs which have a direct link to the expected outcomes (the four aims).

(2) The influence of other dominant variables

- Little consideration of the pathways where player opportunity has been created historically through clubs and leagues in the six elite leagues.
- The rule assumes there is a homogenous approach by clubs to player development strategies with no acknowledgement of the influences of club culture and ownership models on providing player opportunities.
- No accounting for the different structures (e.g., league size, B teams) within the six elite leagues in Europe.

(3) Lack of overarching Theory of Change

- Little consideration of the disparity of inputs (financial, infrastructure etc.).
- Limited understanding of the mechanisms (inputs or activities) required to create the change in clubs/leagues needed to meet the stated outcomes.
- No traceable link between the inputs/activities with the stated outcomes and impacts, which are also vague and limited.

The following sub-sections discuss these key themes.

6.1 Development of the measurements used to quantify playing data

Identifying the methods, metrics and outputs required

The data which underpin this programme of research can help to connect the understanding between UEFA's player migration legislation (at the macro level) and the implications for player development strategies and implementation of the rules at National Association/league level (meso) and club level (micro). It also helps to create knowledge around the efficacy of the intervention, notably how such legislation is interpreted and adopted by the stakeholders tasked with responding to the new rules. This contrasts the stance of those that designed it, who hold little influence over how it is interpreted and adopted.

The development of the variables included in the analysis from the early studies means analysis can take place looking at sub-groups in more detail and this can be done by player, club, nationality, league, age, and academy attended. Data from 2006-2016 [REF-5] outlines that the four clubs producing the most players are amongst the biggest in the European game (Ajax (99), Feyenoord (71), Barcelona (68), Real Madrid (58)) with Feyenoord (36), Utrecht (36) and Athletic Bilbao (32) developing the most players for their own first team. The 'best performing' clubs in the other leagues for producing players are also amongst the biggest and richest clubs (Manchester United in England, Juventus in Italy, Lyon in France, and Stuttgart in Germany). This suggests those clubs already in the strongest position (status, finance, infrastructure) were starting from a more advantageous position and have continued to attract the best prospects into their club which helps to meet the home-grown quotas in future years. From a National Association perspective, players from France recorded the most minutes in the top 6 leagues (8.1m) followed by Spain (7.9m) and Italy (7.3m) with Netherlands (6.5m), Germany (4.8m) and England (4.6m) further behind [REF-3]. A key research question is examining whether UEFA's intervention created any additionality in elite European football over and above what would have taken place anyway. The changes in player opportunity (and differences) can

be seen in Table 2 which shows the proportion of minutes by home-grown players reduced overall (2008- 2015) from [REF-3].

Table 2 Change in minutes played by eligible players (under 21s and all 2008/09 to 2014/15)

| | | 2008-2009 | 2014-2015 | Sig | | | | 2008-2009 | 2014-2015 | Sig | |
|--------------|------------|--------------|--------------|------------|---|------------|--|---------------|---------------|------------|---|
| England | U21 | 5.17% | 4.15% | Yes | ↓ | All | | 37.25% | 36.24% | Yes | ↓ |
| France | U21 | 6.79% | 10.39% | Yes | ↑ | All | | 54.40% | 51.16% | Yes | ↓ |
| Germany | U21 | 7.51% | 7.51% | No | → | All | | 41.73% | 47.47% | Yes | ↑ |
| Netherlands | U21 | 13.10% | 21.53% | Yes | ↓ | All | | 54.68% | 65.27% | Yes | ↑ |
| Italy | U21 | 3.17% | 3.40% | Yes | ↓ | All | | 61.84% | 45.03% | Yes | ↓ |
| Spain | U21 | 6.79% | 5.86% | Yes | ↓ | All | | 62.93% | 58.58% | Yes | ↓ |
| TOTAL | U21 | 8.79% | 8.20% | Yes | ↓ | All | | 52.29% | 50.22% | Yes | ↓ |

No system to monitor outputs to expected outcomes

Laskowski (2019) outlines that the development and protection of young players is one of three functions in European football that demonstrates solidarity (the others being collective bargaining of media rights and actions to enforce competitive balance, such as the home-grown rule and FFP). The European Commission accept this structured solidarity between different organisations across different levels is a special characteristic of sport promoting open competition and fairness. The outputs which underpin this programme of research challenge the assumptions in the notion of solidarity. It highlights the outputs created by the divergent recruitment and development strategies and approaches employed by clubs (which are not explicitly monitored by UEFA). It exposes the differences in priorities between the main stakeholders, namely the governing body (UEFA) at the macro level, different National Associations (at the meso level) and clubs (at the micro level) for implementing player development legislation.

The outputs help to construct the narrative which creates new knowledge around the efficacy of legislative intervention, notably how such legislation is interpreted and adopted by the stakeholders tasked with responding to the new rules. The creation of additional observable metrics in this research programme across the big six leagues in European football demonstrates that each club has responded very differently to the rule. Some clubs have shown it is relatively easy to operate in the same way and essentially circumvent the quota metrics UEFA set-out in the regulation. With no specified definition and link to outputs and outcomes, or a system to monitor change, the rule was flawed in terms of influencing change within its four stated objectives.

Manheim (2018) argued that building better metrics is required in a change programme to (1) specify metrics that are more closely related to the goals set, and (2) prevent ‘gaming of the system’ between the reward system and the true goals. The assessment of the rule’s efficacy shows that first, the metrics

put forward by UEFA in the rule were not metrics that required clubs to significantly change their approach, and therefore the rule was less likely to meet its aims (and additional metrics were not considered or monitored). Second, very few clubs have attempted to ‘game the system’ because the reward system for meeting the rule was non-existent. The reward system in European football is not consistent (e.g., skewed European competition entry quotas, unequal distribution of financial revenue etc.). Third, the true goals of the home-grown rule do not align with many of the core goals of the clubs (i.e., on-field, and commercial success). These goals can still be achieved without the need to game the system to adhere to the home-grown quotas.

The behaviour of the clubs does not follow the conventions of expected behaviour from management theory (e.g., ‘what gets measured gets managed’, attempting to game the system etc.) which outlines the ineffectiveness of the rule to create cultural and behavioural change across the biggest 6 of the 55 National Associations under UEFA’s jurisdiction. The data presented in this research backs this up with a decrease in the proportion of eligible home-grown players being developed in the elite leagues, which suggests the home-grown rule has not achieved its primary objective (Table 1).

6.2 The influence of other dominant variables

Influence of culture on player development pathways and strategies

The first paper [REF-1] cited that the English Premier League acted as a silo for English players, and this issue was exacerbated when compared with the other five largest nations [REF-2] where there was a much greater representation of players in the other major leagues. Eight years later, in the 2020-21 season, only 18 English players were in one of the other five top-flight leagues (1 in Spain, 4 in Italy, 6 in Germany, 3 in Netherlands, 4 in France). In terms of minutes played by English players outside the EPL in the other five leagues, England recorded only 19% of the next lowest total (Germany) and just 3% of the highest total (France). Furthermore, examples of English players plying their trade in Europe were limited, and for the internationals, the vast majority all played exclusively in England (e.g., in Euro 2012, all 23 players in the England squad played in England). The data from the programme of research outlines clear differences between clubs (of similar stature), between the different leagues and the migration of players to different leagues [REF-2]. For some clubs, a strong culture and philosophy for developing talent are rooted in history e.g., Basque heritage at Athletic Bilbao, Ajax Youth Academy and La Masia at FC Barcelona.

The ‘club-trained’ or ‘association-trained’ requirement in the quotas is part of the design flaw. The behaviour of clubs and the National Associations/leagues is out of the direct control of UEFA. Club strategies are subject to significant caveats around the influence of culture, finance, club philosophy

etc. All clubs, regardless of their strategy and resources, are required to respond to the same quotas, but all approach player development differently based on their circumstances; therefore, UEFA have no control over this, and did not create stronger control by implementing the home-grown rule.

Diezel et al (2013) outlined that in the formative years of the rule, club policy around player development appeared to be influenced by factors more than the home-grown rule. The data collected and presented across this programme of work suggests that club policies and approaches differ so markedly, as do the outputs from each club and country, that the flawed design of the rule was never going to overhaul individual club culture and approach. The relaxation around the rules for players changing nationality (to only unable to after playing in a competitive senior fixture) and players with dual nationality not deciding international allegiance until they are much older also adds complexity to the quota rules.

Structure of the leagues

The structure of the six associations' league competition varies (e.g., number of teams, relegation/play-offs, B/C teams), as does the number of professional clubs in the pyramid, all of which influences and impacts on the development routes and pathways. England (92 plus some in Tier 5) has the most professional clubs, compared to the other five which range from 38 (Netherlands) to 56 (Germany). The presence of second/B teams in the league structure is permitted in four of the six leagues, excluding England and Italy. The home-grown rule does not take such structural differences into account, and the aggregated data [REF-5] outlines that those clubs with a B team in the professional structure record much stronger home-grown outputs (number of players, appearances, minutes played). There appears to be a strength in this structure (i.e., transitioning young players into the lower tiers of the professional game in the same club environment/philosophy as the first team, to assist the transition, access to similar facilities/coaches, not having to move, etc) compared to a system where more clubs are competing e.g., in England. English and Italian players recorded the fewest minutes in their domestic league, and the disparity becomes even greater when one considers that the German and Dutch players compete domestically in an 18-team league compared to 20 teams in England [REF-2].

The sample of those clubs with a second team (n=73), produced a similar number of players as those without (n=127), but generated a greater volume of overall playing time and rate of transition into the first team, see Table 3) [REF-5]. Although there are no transfer fees involved in the transition of players from academy teams or second teams, critically academy teams do not play in the professional structure in the way B-teams do. This means player transition is managed differently depending on

the structure. The B-team structure is not followed in England and Italy where there are more professional clubs and there are no plans to change as the larger professional pyramid is part of the history and culture. The B-team structure appears to benefit clubs in the recruitment and transition of home-grown players in those nations with a longstanding B-team culture in place. In-house transition alongside substantial transfer budgets means some clubs have greater resources and pathways in place to enable those clubs to register home-grown players. Some of Europe’s biggest and richest clubs (Barcelona, Real Madrid, Bayern) still utilised their B team pathway to their first team alongside high-value transfers. Some of the more prominent clubs in England (Chelsea/Manchester City) and Italy (Napoli/Inter) where B teams are not permitted recorded very few home-grown appearances/minutes (2006-2016) [REF-5].

Table 3 – Influence of B Teams

| | Overall Sample Second Team: “No” N = 127 Sum (Mean “per club”) | Spain, Holland, Germany, France Second team: “No” N = 54 Sum (Mean “per club”) | Second Team: “Yes” N = 73 Sum (Mean “per club”) |
|-------------------|---|---|---|
| Seasons | 683 (5) | 282 (5) | 477 (7) |
| Number of players | 1,665 (13) | 775 (14) | 1,552 (21) |
| Appearances | 60,575 (477) | 34,184 (610) | 78,698 (1,078) |
| Minutes | 4,080,651 (32,131) | 2,314,662 (41,333) | 5,309,485 (72,733) |
| Same club No | 925 (7) | 493 (9) | 908 (12) |
| Same club Apps | 20,335 (160) | 13,058 (233) | 26,710 (366) |
| Same club Mins | 1,342,495 (10,571) | 875,920 (15,641) | 1,750,724 (23,983) |
| U16-20 caps | 10,283 (81) | 4,357 (78) | 11,303 (155) |
| U21 caps | 3,371 (27) | 1,275 (23) | 3,175 (43) |
| Senior players | 148 (1) | 59 (1) | 147 (2) |
| Senior caps | 1,637 (13) | 766 (14) | 1,837 (25) |

For second/reserve teams, England has a Premier League 2 competition for under 23 outside of the league pyramid [REF-5] which the research outlines are not replicated elsewhere and is not generating a higher proportion of under-23s into senior football in England [REF-2]. Research published during the writing of this document (Webb et al, 2020) corroborates this view, outlining that progression can be dependent on the league structure you are in. The under-age structure in England, for example, is not replicated in other leading nations. The research suggests that there are significant differences in the way professional football is structured in European leagues, and the home-grown rule does not account for such differences.

6.3 Retrospectively applying a Theory of Change

The disparity of inputs

In economics the principle of scarcity is the theory describing how limited supply combined with high demand creates an imbalance, and this can be seen in elite professional football with a limited supply of players capable of the demands required to win championships. The development (or acquisition) of the best players is an expensive pursuit in modern football, and with home-grown regulations requiring qualification criteria to be met, there is an additional premium on players that are a) of sufficient quality and b) can be included as a ‘club trained’ or ‘association trained’ player. The ability to acquire players is determined by the financial inputs a club can access via their ownership model or revenue streams, and inputs are a core facet of the ToC. One element of UEFA’s rationale for the home-grown rule was to counter Europe’s wealthiest clubs dominating domestic and UEFA’s own competitions (Champions League, Europa League) by improving competitive balance in European football (Dalziel et al., 2013).

Champions League revenues are an important factor when considering ToC, in relation to the ‘inputs’ column. One of the ‘inputs’ for player development/recruitment is the revenue clubs generate, some of which is used for developing young players or for the transfer of players from other clubs. In programme theory, the scale of the inputs is a key determinate for the volume or quality of the activities undertaken, however in European football, not all clubs are equal from an ‘inputs’ perspective. Aside from commercial revenues, broadcast deals and match day income, which fluctuate between clubs/leagues, entry into UEFA’s premier competition, the Champions League, is a gateway to enhanced prize money and the opportunity to maximise other revenue streams [REF-4]. Between 2006 and 2016, 108 teams competed in the group stages of the competition, sharing €10.8bn, and although the six leagues which form the focus of the research programme supplied 48 teams (44%), they were awarded 253 of the 448 places (56%) and received €8.02bn (74%) of the revenue. Ten clubs alone secured €4.35bn (40%) and four clubs (Real Madrid, Barcelona, Bayern Munich, Chelsea) received more than €0.5bn each, equating to 19% of total prize money awarded [REF-4].

UEFA’s home-grown rule applies to all clubs in the Union. From a programme theory perspective, not all clubs are working with the same level of inputs (which drive activities and behaviours) and there are significant differences in the activities undertaken by clubs and in National Associations when it comes to developing elite players. Clubs have been categorised throughout the research (e.g., ever-present clubs through to clubs with one season in the top division). Overall, 35 of the 48 qualifying clubs from the top-6 leagues were category 1 (ever present) in their top-flight; a further

four from category 2 missed only one season [REF-4]. In England, the eight ever-present clubs (2006-2016) received €1.935bn, however two clubs (Aston Villa and Everton) received no revenue as they did not qualify. Tottenham received €75.7m for one entry; the other five clubs received €1.860bn. Similar disparities occurred in other leagues between ‘ever-present’ clubs. Prominent examples include Real Madrid (€0.54bn) and Barcelona (€0.53bn) compared to Espanyol and Getafe with zero Champions League revenue in Spain. Bayern Munich received €0.51bn and Hannover 96 received zero in Germany, and AC Milan received €0.31bn and Udinese €9.3m in Italy. UEFA’s home-grown quotas are applied uniformly across all clubs regardless of the ‘inputs’ available to recruit and develop players. The difference in budgets to acquire scarce resources is, as shown in [REF-4], more heavily imbalanced than ever before. By contributing significantly to the disparity of financial input in the elite game, UEFA are significantly influencing the player development environment. This impacts upon the behaviour of clubs and in turn the level of local identity, stockpiling players, and competition fairness which their home-grown rule was designed to improve.

The European Parliament and the European Commission accept that the organisation of sport in EU countries is underpinned by ‘vertical solidarity’, where mechanisms have been created to distribute financial support between the different organisation types (Laskowski, 2019) e.g., professional clubs to amateur/grassroots clubs. UEFA aim to support the redistribution of finance under the principle of solidarity between all levels in the game (Laskowski, 2019). The revenues distributed by UEFA [REF-4] do not, however, paint a picture of solidarity when four clubs have received 19% of all Champions League prize money (2003-2017) and clubs from England and Spain were allocated 25% of all places in the competition.

Understanding the mechanisms that create change

By applying a ToC to the rule [REF-5], we can address two key questions. First, whether the activities observed would have taken place without the intervention (home-grown rule) and, second, whether the activities observed would have taken place in the same format without the intervention.

Traditionally, professional football clubs at various levels of the game have always had apprentice/youth programmes/academies and developed players through this structure. This process of player development occurred before UEFA’s intervention. To understand whether any positive change (additionality) in the system had occurred from investment (of time and effort) because of the legislation, or whether it is something that would have taken place anyway is paramount (Weed, 2014). Attributing any additionality from the introduction of regulation is difficult without assessing the underlying ToC which explicitly outlines the expected outcomes, the process from which they

can be traced and the mechanisms that cause change. The production and development of players and international transfers were well established prior to UEFA's rule change, and the data from the papers has shown little change in behaviour within most clubs or leagues. The nature of player development, transfers and recruitment strategies have evolved substantially with greater financial resources available, although the market conditions in each league vary considerably and between clubs in the same league. Previous research outlined that the richest clubs will always attract young players to their organisation (Smokvina 2013). One unintended outcome was that there was greater interest in making players fit the eligibility criteria to be home-grown at an earlier stage in the development process than before the rule came in. Therefore, those clubs with the most appealing offer and status are more attractive to the best up and coming talent. Not all clubs (and leagues) were starting from the same platform when the rule came into effect, therefore the ability to enact change in their recruitment and development strategy varied considerably between clubs.

UEFA's design of the rule has some major flaws that, when applied using the logic underpinning a ToC, highlights some of the gaps and weaknesses in introducing the necessary mechanisms required to achieve the four aims (UEFA, 2005). For example:

Aim 1 - encourage the local training of young players: by not providing specific and direct inputs, structured activities, incentives/sanctions or targets and tracking, 'encouragement' was not a strong starting point.

Aim 2 - increase the openness and fairness of European competitions: With clubs all starting at different stages, in different leagues, with different budgets/revenue, those already at the elite end were in a much stronger starting position which reduces the ability to deliver fair and open competitions.

Aim 3 - counter the trend for hoarding players: placing clubs at the centre of the change process without providing inputs to drive specific activities designed to change culture and practice diminished the ability to prevent hoarding of players. The age band introduced for qualification as home-grown (15-21) potentially contributed to a shift in behaviour where recruitment of players focussed on earlier stages of the development pathway.

Aim 4 - to try to re-establish a 'local' identity at clubs: not being able to make nationality a factor due to EU Commission rules removes much of the ability to protect local identity. The layered approach (club based and association based) was also too easy to circumvent with the broad eligibility criteria applied.

Creating a traceable link between the inputs and activities with the outputs and outcomes

A ToC articulates how programme inputs (e.g., finances, specific activities, and support) will be allocated or used to generate the outputs and outcomes defined (Weed, 2014). The inability of UEFA to control dominant variables, are flaws in the legislation, and the rule has had little discernible influence on the behaviour of clubs. The design of the home-grown rule could be described as weak in terms of its ability to influence positive change in its current format, and meeting the rationale cited for its introduction. Using the format of a logic model, weaknesses in each pillar can be identified:

Figure 2 – Identifying weaknesses in the design of the rule using a logic model

| Inputs | Activities | Outputs | Outcomes |
|--|--|---|---|
| <ul style="list-style-type: none"> • No centralised and structured funding provided for increasing attention/budget for youth development (e.g., redirection of some Champions League revenue) as an incentive • All clubs started at different points (budgets, league, ownership structure, philosophy) • No direction to allocate funds (amount or %) to drive specific activities for youth development • Majority of UEFA Champions League revenue distributed to elite clubs | <ul style="list-style-type: none"> • No structured activities/direct intervention stipulated • Approach taken to meet the quotas left up to clubs to decide • No timeline or review mechanism built in • Loose definition of expectations • Loopholes easily worked through (either via club or association trained measure) • Not widely championed/endorsed by leading clubs at the outset | <ul style="list-style-type: none"> • Focus on metrics (quotas) that do not drive change • Weak minimum expectations stipulated • No targets or measures attached for actual time/appearances on the field • No tracking of the outputs to assess efficacy | <ul style="list-style-type: none"> • Very different implications for each club to be able to achieve quotas • Some of the outcomes not applicable to all clubs in the same way e.g., fairness of Champions League competition • The rule was not deemed important enough by some clubs to change strategy e.g., stockpiling players continuing • No rewards for compliance/improvement • Weak sanctions for non-compliance |

By developing retrospective logic models and applying ToC, the programme of research has analysed UEFA's legislation regarding the activities it predicted against the expected outputs and outcomes (Coalter, 2011). Programme theory allows practitioners to understand how planned activities can develop desired outcomes by following a clear process i.e., create a contextual aim, provide inputs to deliver specific activities, which generate clear outputs that can lead to expected outcomes (Weed,

2014). This collective body of work outlines where there are clear issues in the design of the legislation.

7. RESEARCH COHERENCE: SUMMARY

The data which is used to create this research programme is quantitative in nature and has developed from [REF-1], which aimed to develop the early work done in this area by other academics, and has further progressed in volume, variables used and sample inclusion. The papers presented in this body of work utilised secondary data analysis to examine player opportunity from different perspectives (nations, clubs, club types etc.). The variables used in the work were expanded following a process of critical reflection via the feedback from the review process, and then pursued additional avenues of investigation.

Elite football could be described as a 'product' which creates a special relationship between the clubs and their fan base (Pache and Ika, 2016). In the modern era, professional sport, and football, is a significant and substantial business, but with unique links to wider aspects of society and communities. Professional football crosses the realms of business, culture, history, and sociology with significant relevance for local communities through to its position on the global stage. History outlines how many clubs were founded through local culture and identity and such emotive networks and ancestral links are still commonplace in many clubs. Such factors can be strong influences in the way clubs forge strategies and business plans around player development and recruitment, but the level of influence of local culture has varied, which makes it difficult to determine truly objective observations. However, it is possible to objectively measure playing data and investigate how club culture and philosophy can determine actions in response to legislation changes. The headline findings of the collection of papers outlines:

- There are clear differences in the volume and 'quality' of playing opportunities for home-grown players between nations (and cultures) and the rule has not abated those differences.
- There are clear differences between club types (size, wealth, success/standing) and club culture (e.g., philosophy) both within and between nations.
- The structural differences between nations (domestic leagues allowing second teams) appears to influence the process of transitioning young players and the volume of playing opportunities generated.

The research has practical implications for UEFA as the governing body charged with creating, designing, and implementing regulations to protect home-grown player opportunities. The

recommendations outline the need for UEFA to implement a clear ToC for any future interventions, with greater consideration of the relationship between inputs, actions, outputs, and outcomes, and the mechanisms for creating change. The application of programme theory in the design of new regulations in football is a prominent discussion point emerging from this research.

The programme of research also demonstrates the importance of examining the efficacy of legislation after it has been implemented, outlining how there needs to be a link between the fundamental rationale of legislation with a clear ToC, to enhance the ability of legislation to influence and deliver intended outcomes. The studies have demonstrated a requirement for legislation in elite football to be scrutinised against the aims they were set, using research to examine the impact of the organisational intervention from UEFA using playing data. This allows the research to provide both a retrospective analysis and develop additional awareness into the future direction of player development and opportunity in elite football administration. Stakeholders (UEFA, league administrators, national team associations, players, coaches, managers, and agents) have a collective responsibility towards the governance of the game and its future direction, therefore the analysis of empirical evidence is of paramount importance in this process.

The programme of research continues to develop and is relevant when future legislation is devised. The key findings around the limitations of existing rules are vital considerations to those drafting future regulations to ensure any rationale for change can be met through the creation of new guidelines. These would need to adhere to EU Commission rules on freedom of movement and, in England, the post-Brexit rules which prohibits signing non-UK players under the age of 18. Ensuring future UEFA regulations regarding player development have a clear ToC, which allows administrators to develop a tighter framework linked to more specific outcomes, would underpin a more rigorous programme of change. This framework would then direct stakeholders towards allocating inputs and delivering core activities which enable them to meet intended outcomes which are then attributable to the intervention made.

The research concludes that UEFA's home-grown regulations had a limited theoretical framework underpinning it and the rationale for the legislation design could be criticised for (1) focussing on less relevant outputs (e.g., squad quotas not actual playing time) and not the process to improve player development (2) not controlling the dominant variables (e.g., financial inputs, specified activities, protected time, infrastructure) and (3) no theory of change.

The rule was presented with the following aims (UEFA, 2005):

“UEFA's rule aims to (1) encourage the local training of young players, (2) increase the openness and fairness of European competitions. It also aims to (3) counter the trend for hoarding players, and (4) to try to re-establish a 'local' identity at clubs.”

A key research question to assess efficacy is whether UEFA's intervention has created any additionality in elite European football over and above what would have taken place anyway? This research programme suggests that the design of the home-grown rule has not created any meaningful additionality in any of those four aims which can be attributed to the intervention by being traced back through specified actions or targeted inputs. The legislation's design means it is weak in its ability to change the approach and culture involved in player development strategies in European football. Oswick and Grant (1996) suggested that a basic principle of organisational development was that change could be categorised into either a 'process-based' journey, where the developments and learning over time shape the next steps, or a 'destination-based' journey, where there is a clearly defined end point. The application of a ToC outlines that UEFA's rule does neither of these approaches.

8. NEXT STEPS/FUTURE RESEARCH

Improving the player pathway by protecting playing opportunities was identified as an important issue in elite men's football, enough for UEFA to create new regulations and impose those new rules on all elite clubs through the home-grown rule. This collection of outputs presented in this document has demonstrated that the approach was problematic, even if the sentiments were well intentioned. The body of research presented is looking at UEFA's rule from a design perspective, however there are a multitude of contributing factors in player development pathways in professional football which are acknowledged, but not examined in detail here. For example, this research includes league structures, cultural differences, allowance of 'B' teams and the disparity in income from UEFA's premier competition. It does not, however, include other areas which have been researched by other academics including, but not limited to, the influence of:

1. Networks (agents, intermediaries), transfer fees, and loans in player migration (e.g., Bond et al, 2020; Poli, 2010; Gerke and Wäsche, 2018).
2. The different structure of governance e.g., Manager/Head Coach, Director of Football (e.g., Parnell et al, 2018; Saarinen, 2020) and ownership models operating in European football e.g., shareholders, fan membership, the 50+1 model, consortia, single oligarch.

3. The emergence of “global organisations” and their approach to player development pathways, e.g., City Football Group (including Manchester, Melbourne, and New York City), and Red Bull (Leipzig, New York and Salzburg).

Future work in this area could look to develop the understanding of player development strategies in other European countries outside of the main six leagues following a similar method to identify the patterns and pathways occurring e.g. in Portugal, Scotland, Czech Republic, Belgium. More challenging would be to delve deeper into the clubs under discussion here and try to identify the causal mechanisms in play as to why certain strategies occur, their aims, the motivations behind them and the differences between and within leagues. The methodology presented in this programme of research is quantitative in nature and measuring the success of a change process can also be qualitative. This alternative method would offer a complementary perspective and more from the interpretivist paradigm and help to understand the causal mechanisms behind the patterns found. This could also include interviews with representatives from UEFA, the designers, and governors, and from club directors, coaches/managers to gather additional insight. This could also be done with an economics viewpoint, e.g. the cost/benefit of an academy, or from the perspective of whether academies operate under the concept of sport for social good.

Since the publication of the final paper in this collection [REF-5], there have been additional developments in world football, and changes that will influence player migration and opportunity. The following are potentially some of the most significant:

1. FIFA, the governing body of the world game, have placed restrictions on the total number of loans clubs can facilitate per season, restricted to six per season (in or out) by 2024 for players aged over-21. There are also limits on club-to-club loans, capped at three, to prevent clubs hoarding young players. This is an interesting change, given that many professional clubs in England have recently developed a new strategic role in their club, with a member of staff appointed to act as a loan manager, to oversee the development of players away from their parent clubs.
2. The post-Brexit rules in England, which will prohibit clubs from signing non-UK players under the age of 18. This will also require a step-change in strategy for some clubs in how they recruit young players to qualify them as home-grown via the ‘three years between 15 and 21’ UEFA stipulation, to fit either the club trained or association trained qualification. This may result in clubs creating new strategic relationships so they can use clubs as a conduit to

register players on their 18th birthday, with an agreement to transfer them later should they develop sufficiently.

3. Despite the failed European Super League venture, from 2024/25, the Champions League group stage will increase to 36 teams (from 32) and play in a single league format. This will increase the number of clubs playing in the elite competition, and subsequently their budgets for transfers, which may impact on their player development strategies and player opportunity.

In modern day professional team sport at the elite level, especially in football, the management and governance of the game is complex as it has increasingly become an idiosyncratic commercialised 'product' (Smith and Stewart, 2010). As Smith and Stewart note, as the bureaucracy has developed, so to have the structures and cultures into a diverse and heterogeneous system. Bond et al, (2020) outlined that clubs have, through increases in revenues, continued a strategy of purchasing and stockpiling the best players, resulting in domestic domination by a small pool of clubs. Financial strength was, in UEFA's view, reducing the incentives for clubs to develop and produce young players (and in turn, protect local identity). This research programme suggests the issues raised by UEFA have not abated due to their home-grown rule. This work provides greater insight into the development pathways in European football and how UEFA have tried to influence proceedings. The themes discussed aim to advance the knowledge in the field of designing interventions to improve player opportunity. These lines of enquiry can help to facilitate the design of more robust regulations in future, understanding of the mechanisms which create change (i.e., a stronger, more explicit, and more aligned understanding of the inputs and activities which create outputs, and drive outcomes), and greater consideration of the dominant variables which influence behaviour.

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