# Scottish FA

# Report on the 'Transition Phase'

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*Report commissioned by Professional Game Board*

## Introduction

Further to approval by the Scottish FA Professional Game Board (PGB) in September 2023, and in relation to well documented issues facing Scottish football at the transition phase (players aged from 16-21 years of age) of the elite player pathway, this report brings together clear data and insight into the issues and challenges which stakeholders are facing across our game.

The challenge of transitioning players from academy football to the senior game, through data from the Twenty First Group, UEFA, FIFA, and other key sources has shown that Scotland faces specific challenges which limit the future performance of our professional clubs, our national team, and limits the economic growth of our game.

The approach included gathering and collating key data points from a wide range of sources which confirm the challenges mentioned above. In addition, we consulted with coaches, managers, academy staff, club leaders and other stakeholders involved in the running of our game. Taken together, this allowed us to clearly understand and highlight the issues facing Scottish football and explore opportunities for improvement.

Further to this, we have sought input from external stakeholders involved in the game at various levels to better understand the best practice being used around Europe in the transition phase.

The report also sets out opportunities and recommendations towards tackling the challenges raised by stakeholders within Scottish football. In addition, we clearly outline the incentive for change, which can allow simultaneous improvement on and off the pitch, both at club and international level.

Within the report, there are learnings for those involved at all levels - including professional clubs, the SPFL and the Scottish FA. This provides the opportunity for the creation of a collective implementation plan, combining immediately implementable changes with the need for a further and deeper analysis of youth development (before the transition phase) across our game.

Whilst the report focuses heavily on the issues faced within the men's game, time has been taken to outline the implications the Girls & Women's pathway as it continues to grow and professionalise. Section 6 describes this context in more detail, alongside some challenges and issues which are already visible.

"Everything is connected in our sport. We are all connected. Giving every talent a chance requires everyone to play their part."

FIFA President

## Definitions

**Transition Phase** - Refers to players aged between 16 and 21 who have moved from an academy environment to a professional contract.

**Senior Football** – Any level within the country's professional pyramid structure which is not age-restricted.

**Debut** – First senior appearance in a competitive game, not including friendly matches or matches which are not officially recognised by the country's governing body.

**Comparable Countries** – Country must be in Europe and have less than 10 million in population.

**Scottish Player** – Player eligible for the Scottish National Team.

**Scottish Raised Player** – Player who has spent their development years (aged 12-15) within the Scottish system, regardless of country of birth or national team eligibility.

**Top 5 Leagues** – Refers to the top-tier divisions in England, Spain, Italy, Germany and France.

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# Section 1.

# The Incentive for Change

**Why Should We All Care About this Report?**

This report, which has been conducted with backing from a wide range of stakeholders, is aimed at aiding the Scottish FA's ability to understand and work in collaboration with clubs to achieve mutually beneficial objectives.

As Section 1 will show, the findings of this report provide significant incentive for change. We will highlight that, by following a clear strategic plan which places importance on the development of the academy and the transition of young players, we can expect to see, over the long run:

1. Clubs who follow this approach achieving better results, both domestically and in European competition.
2. Clubs who follow this approach having significantly less expenditure.
3. Clubs who follow this approach see significantly increasing revenues.

The reason why this project is also important to Scottish football is very clear on all levels – if we improve the quality and volume of young Scottish players, we will simultaneously:

1. Improve team performance at 'A' National Team level (in terms of qualification and achievement within major tournaments). This, in turn, brings greater revenues for the National Association, which in turn, can be used to enhance the overall game.
2. Provide more elite role-models at the top end of our game to, in turn, further inspire the grassroots and participation base of the next generation.
3. See our clubs become more competitive in European competition, which in turn, makes the game more marketable as a whole.
4. Improve the level of football at every stage of the pyramid, by increasing the density of the talent pool, bringing a higher level of product to stakeholders and spectators – and in turn, bringing more revenues to the game.

## The Performance Debate

Interestingly, during the consultation phase of this project, which involved speaking with at least one individual at all 42 clubs across the SPFL pyramid, and often at various levels within the club, the most common reasons given for the lack of young players featuring at first-team level were team performance related.

The majority of clubs – either directly or indirectly in their phrasing - felt that starting a young player would have a direct negative correlation with results.

However, research in this area, referenced by globally respected football strategist Mads Davidsen in his 2021 book *'How Hard Can It Be?'* showed that this was, in fact, a myth. This has been confirmed to us in consultation with 21st Group – leaders in global sporting intelligence, who carried out the research referenced by Davidsen.

Of note – Mads Davidsen currently works as Head of Football at Right to Dream Group, which owns Danish Club FC Nordsjaelland – a club which has simultaneously been able to challenge for the league title, qualify for European competition, and consistently have the youngest team across all of Europe's top divisions.

While, naturally, there are examples of clubs who have increased the number of young players in their starting 11 and suffered a decrease in performance, these examples ignore the success of many clubs around Europe who have consistently overachieved against their budget thanks to a club-wide football strategy, centred around developing their own young players from the academy.

The first thing to clarify is – what is meant by 'overachievement'? As Davidsen outlines in his book (2021) – there is around a 70% correlation between a team's 1st team performance and their respective budget. It will come as no surprise to anyone that the club who spends the most on players should win the league more often that other clubs.

The 70/20/10 Rule outlined by Davidsen (2021) can be summarised as follows:

- 70% of 1st team performance can be equated to the financial resources of the club.
- 20% can be equated to strategy.
- 10% is down to 'randomness', or, in common language, luck.

In the short-term, 'randomness' plays a notable part in a low-scoring game like football. Any team can beat the other, which gives football the exciting edge that fans crave. At the time of writing (April 2024), Ross County have just beaten Rangers in the Scottish Premiership. However, over the longer-term (season so far), Rangers currently sit in 2nd position, and Ross County in 11th. Therefore, every team can have a successful game, or even a successful season, through a short-term lens, but this does not necessarily correlate with long-term stability in performance.

Therefore, the question that strategic clubs are more likely to ask themselves is not 'how do we have a lucky season once every 10 years?' – but rather, how do we consistently overachieve against our budget, season after season? And what are the trends in those clubs who manage to achieve it?

This is where the 20% outlined above plays a differentiating role. Having a clear and practical strategy from board level and managing the implementation of this strategy through the details of the daily work, is the way a club can overachieve on a consistent basis. Some of the details surrounding the strategic approach of those clubs who gain a competitive advantage are discussed in more detail in Section 4 of this paper. As we will see, while not all follow this approach (Brentford being a notable example), the majority of clubs who succeed in overachieving on a consistent basis have made the academy and the transition of young players to professional football a central point of their strategy.

Now let us again consider the point raised frequently by stakeholders around Scottish football – that more young players do not feature in our game because they are not ready to deal with the demands of high-level football, despite our top flight not being considered among the top 10 European leagues.

Compare this with the following: over the past 4 years, 407 players have featured in the Top 5 leagues *before the age of 18* – and the trend shows that these numbers are increasing over time. Young players around Europe are being better prepared for the highest level of the game at an earlier stage than ever before, showing that well-operated academies are accelerating the development process.

If the argument held that featuring more young players came at a direct cost to performance, then we would not expect to see the numbers increasing at the highest level of the game.

Figure 1: number of minors used in the big-5, by league (2009-2023)

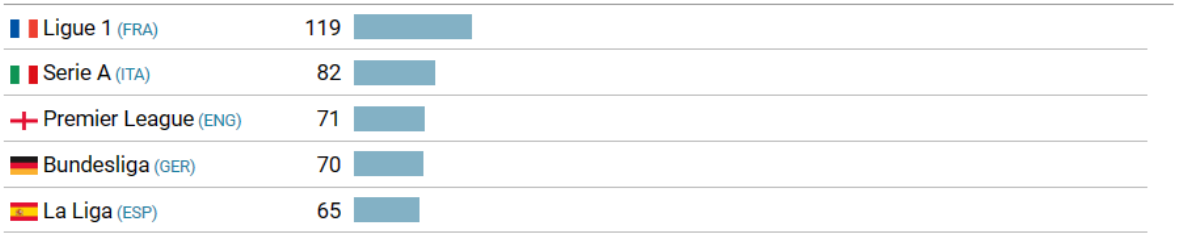
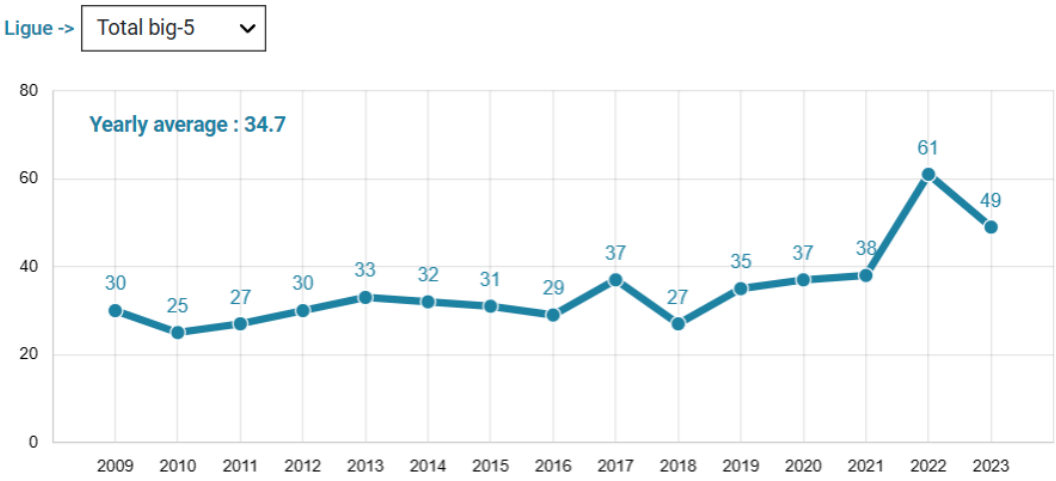



Figure 2: number of minors used in the big-5, per year



*Source: CEIS Football Observatory*

This trend is witnessed not only in Europe's stronger domestic competitions, but also in its strongest competition overall – the UEFA Champions League - where more young players are now featuring than ever before.

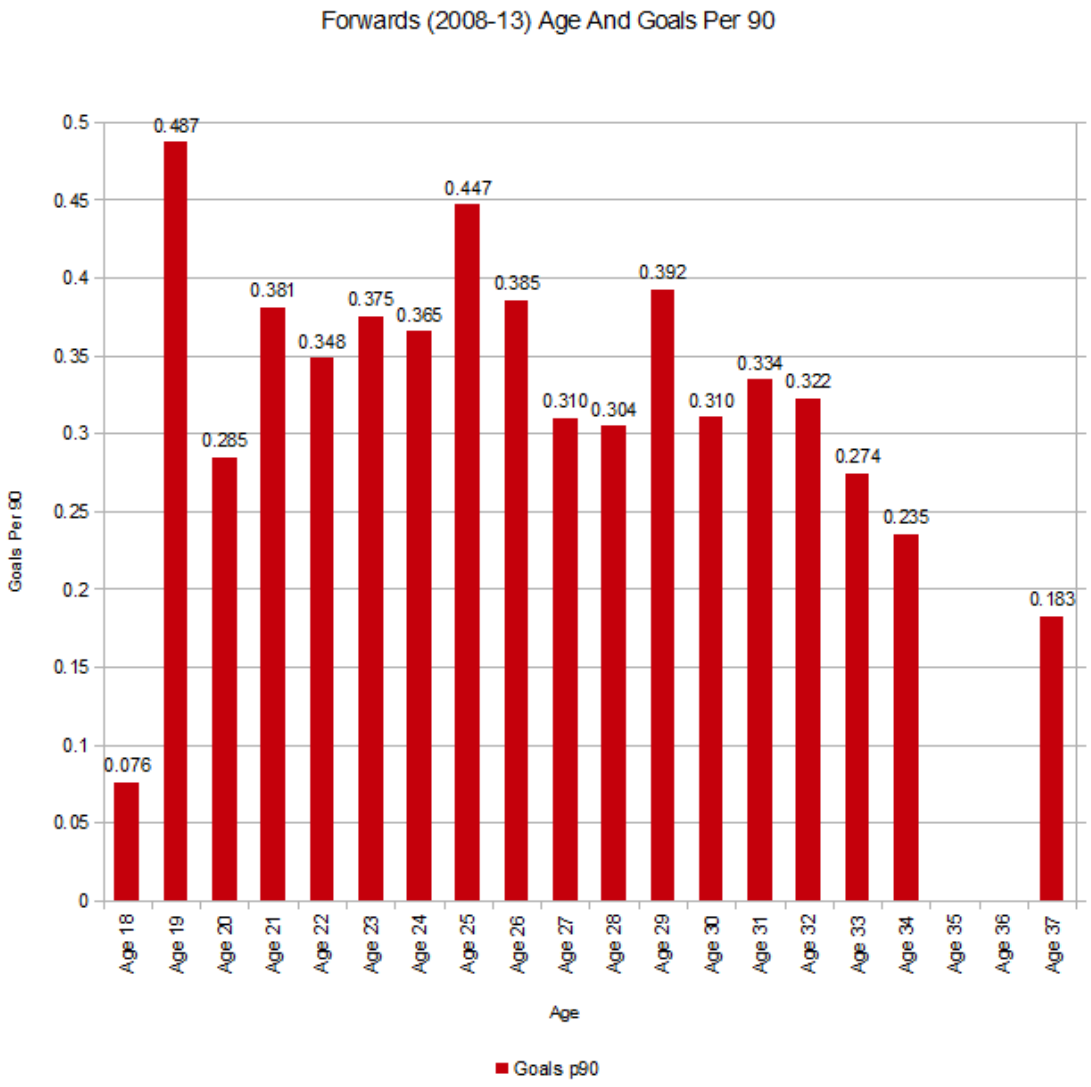
Once again, the facts show that well-prepared young players are able to compete at the highest level of world football, without having a negative impact on performance.

Barcelona made history with Spanish winger Lamine Yamal (16 years and 272 days) and defender Pau Cubarsi (17 years and 79 days) becoming the youngest players to feature in the quarter-finals of the Champions League.

Cubarsi showed no nerves on his European debut and became the first Barcelona player, per Opta, to complete 50+ passes (61/68), 100% of his tackles (3/3) and make 5+ clearances to break a club record that stood since the 2003-04 season.

Some of the reasons for this are discussed in Section 3 of this report on the Trends in Success.

Another interesting study was carried out by Benjamin Pugsley of StatsBomb, who compared the performance of forward players from years 2008 to 2013. As the table below shows, the commonly described 'peak years' of a player (aged 27-28) did not produce more goals than a player in their early 20s. Furthermore, the highest number of goals scored by forward players during this 5-year period was, in fact, scored by 19 year olds.



**The Overachievement of Clubs**

While the data above clearly shows that well-prepared young talents are able to perform at the highest levels of the game without causing a detriment to team performance, let us return to the earlier definition of 'overachievement' – clubs whose performance outstretch their financial circumstances. As we can see in the chart below, the two clubs whose performance data overachieved their budget by the greatest margin in the UEFA Champions League in season 2023/2024 were Real Sociedad and PSV.

FC Copenhagen, meanwhile, were the team with lowest budget who qualified for the Knockout Stages.

*Source: [21st Group]*

Now compare the information listed above with the table on the right (source: Transfermarkt).

The two clubs who reached the knockout stages of the Champions League with the most academy products were Real Sociedad, and PSV.

Unsurprisingly, the lowest budget club to reach the knockout stages (FC Copenhagen) also scored highly.

Based on the 'performance argument' frequently made during our consultations, we should expect that the teams featuring the most academy graduates should achieve the worst results. On the contrary, these clubs do well not *in spite of* having a strategy centred on developing young talent – they overachieve only *because of* their commitment to this strategy. Without their academy, Real Sociedad, PSV and FC Copenhagen would never be able to afford to sign players to rival their European counterparts. Their only option to succeed is to develop their own.

"Give youngsters the opportunity and they will seldom let you down."

- Sir Alex Ferguson, who built his dynasty at Manchester United on the policy of promoting young players from the academy.

"Croatia was in the last four of the last two World Cups so that means success is not limited to big countries. It is just limited to the quality of education and organisation."

Arsene Wenger

Despite the myth that a strategic approach which involves investment in the academy has a direct negative correlation with results, countless examples exist to the contrary, such as:

- FC Barcelona, regarded as the 'greatest team of the generation', winning the 2012 UEFA Champions League Final with 9 of the 11 starting players coming through the academy.

- Ajax significantly overachieving their budget to reach the UEFA Champions League Semi-Final in 2019 with more than half of the team coming through the academy.

- Real Sociedad finishing in the top 4 in La Liga and reaching the knockout stages of the UEFA Champions League despite mandating a policy that 60% of 1st team players come through the academy, which must sign 70% of its talent from a geographical region of 700,000 people.

- AZ Alkmaar being level on points at the top of the Dutch Eredivisie in 2020 when the league was stopped due to Covid – significantly outperforming their budget to compete with the country's biggest teams – with 67% of the 1st team squad coming through the academy and 6 or 7 academy players being regular starters.

- Athletic Club de Bilbao reaching the Europa League Final in 2012 despite mandating a 'Region-Only' signing policy, with 85% of the squad coming through the Academy.

- A wide range of examples on a domestic level around Europe that show that by beginning a strategy focused on development of the academy and promoting young players to the 1st team, a club was able to improve its results on the field. For example, Bodo/Glimt, Dinamo Zagreb, Club Brugge and Sporting Club de Portugal, to name but a few.

## The Financial Incentive

The second major incentive for clubs to focus on a strategic model built around promoting players from the academy was not questioned during our consultations – there is a clear financial benefit.

Without even considering the sale of any academy products, clubs who invested in their academy and then promoted players internally instead of signing 25 players from outside of the club saw considerable return. This point was outlined in a 2018 study by Eye4Talent, which highlighted the difference clubs pay in salaries to an academy graduate, plus the cost of their development, compared with a similarly performing player who has been signed from outside the club (all related fees and player salary).

An ECA study which is due to be published later in 2024 on the Transition Phase correlated this data – stating that "clubs who don't follow this model [of using academy players in the 1st team squad] are losing a lot of money".

Of course, the major financial headlines are taken by the sale of players from the academy. A recent CEIS study into revenues generated by academies (table below) showed the huge potential for profits that an academy can generate through player sales – notably, not a single Scottish club featured on this 100-club list, although a number of clubs from comparable countries did feature.

**Revenues generated by the transfer of academy players (2014-2023)**
€ Millions, Including add-ons regardless of their actual receipt

| Total | Filter by country (ex: ENG) | Players | 2014-18 | 2019-23 | 2019-23 (%) |
|---|---|---|---|---|---|
| 516€M | SL Benfica (POR) | 30 | 182€M | 335€M | 65% |
| 376€M | AFC Ajax (NED) | 36 | 119€M | 257€M | 68% |
| 370€M | Olympique Lyonnais (FRA) | 32 | 185€M | 185€M | 50% |
| 364€M | Real Madrid (ESP) | 28 | 160€M | 203€M | 56% |
| 347€M | Chelsea FC (ENG) | 28 | 41€M | 307€M | 88% |
| 325€M | AS Monaco (FRA) | 18 | 261€M | 64€M | 20% |
| 306€M | Sporting CP (POR) | 31 | 189€M | 117€M | 38% |
| 256€M | Tottenham Hotspur (ENG) | 23 | 89€M | 167€M | 65% |
| 254€M | Manchester City (ENG) | 27 | 49€M | 205€M | 81% |
| 250€M | Atalanta BC (ITA) | 34 | 123€M | 127€M | 51% |
| 249€M | RB Salzburg (AUT) | 18 | 46€M | 203€M | 82% |
| 248€M | PSV Eindhoven (NED) | 22 | 61€M | 187€M | 75% |
| 228€M | CR Flamengo (BRA) | 27 | 66€M | 162€M | 71% |
| 223€M | River Plate (ARG) | 30 | 80€M | 143€M | 64% |
| 221€M | FC Porto (POR) | 19 | 91€M | 130€M | 59% |
| 218€M | Real Sociedad (ESP) | 6 | 102€M | 116€M | 53% |
| 214€M | Bayer Leverkusen (GER) | 11 | 76€M | 137€M | 64% |
| 212€M | Paris St-Germain (FRA) | 27 | 37€M | 175€M | 82% |
| 203€M | Aston Villa (ENG) | 11 | 15€M | 188€M | 93% |
| 199€M | Liverpool FC (ENG) | 19 | 108€M | 90€M | 46% |

Another notable factor is the role that such player sales play in the overall revenue generation strategy of a club. One of the authors of this paper, who has been privy to the thinking of a number of Scottish Premiership clubs at board level, and also has experience working across Europe in similar sized countries, found a distinct difference in the way directors saw the financial sustainability of a club.

- The figureheads of Scottish clubs were focused on areas such as TV deals, ticket sales and merchandising as the main ways to increase revenue streams.
- Their European counterparts were focused on developing young players to sell as the main way to increase revenue streams.

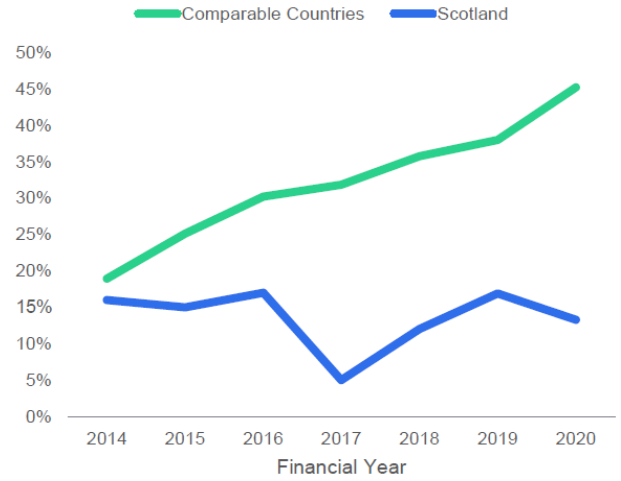
The 21st Group data below, backs this up, showing transfer income has grown much faster than all other forms of revenue generation over a five-year period.

As a consequence, during our consultations, clubs often highlighted lack of available investment in facilities, staffing, and other areas. Our clubs have fallen behind our European counterparts financially because they have not focused on a model which is centred around the development of young players.

Given the 70% correlation between budget and performance, years of not following this model have led to a diminished cycle of reinvestment, which pushes our clubs further behind their rivals in European competition over time.

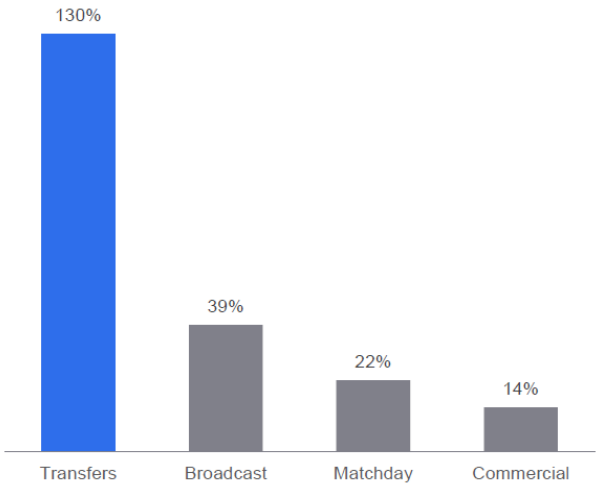
**Transfer income as a % of total income has soared elsewhere**

Transfer income as a % of broadcast + matchday + commercial + UEFA. Comparable countries: AUT, CRO, SUI, ISR, SRB, NOR, DEN




**Transfer income has grown much faster than other types**

Average growth in income stream, 2019 vs. 2014, Scotland and comparable countries



Further data from 21st Group on this page reveals the failure of Scottish clubs to adapt to the new business reality of modern football – that a player trading model is the greatest growable source of revenue, while all other forms of revenue generation remain relatively stagnant.

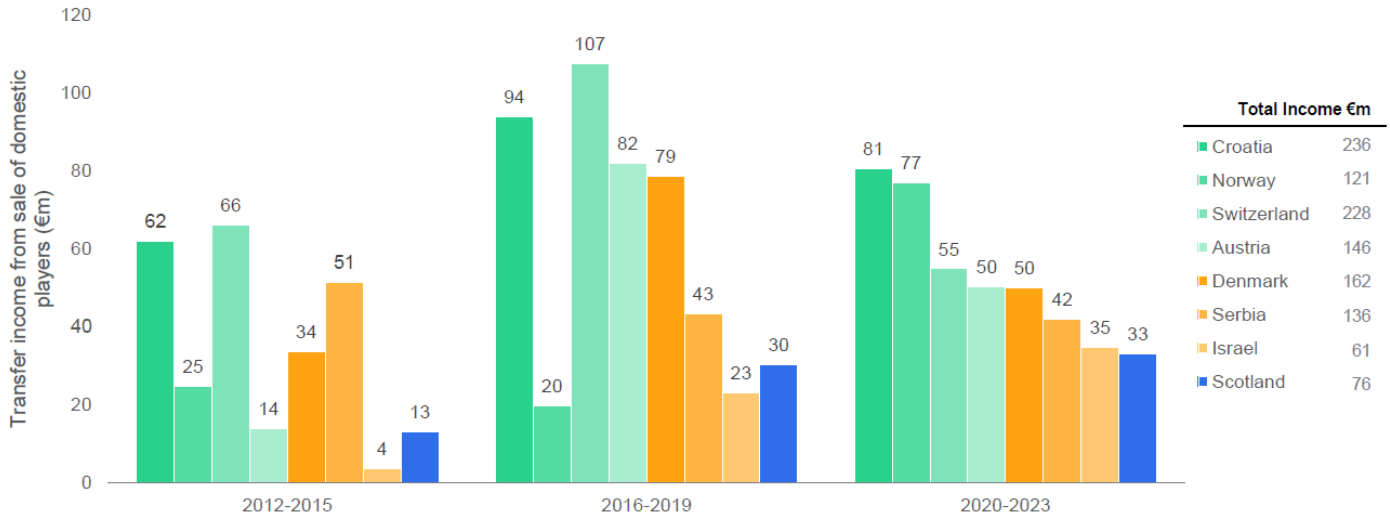
However, our geographic and cultural links to the richest league in European football, combined with the implications of Brexit, and our previous lack of emphasis on this, provide our clubs with an outstanding and significant opportunity for revenue growth.

**Transfer proceeds as a % of club revenue**
Leading European first divisions, 2014 vs 2017

| Country | 2014 | 2017 | Change |
|---|---|---|---|
| Croatia | 75% | 117% | 42% |
| Ukraine | 30% | 66% | 36% |
| Belgium | 24% | 53% | 29% |
| Greece | 25% | 52% | 27% |
| Italy | 38% | 53% | 15% |
| Portugal | 63% | 76% | 13% |
| Germany | 9% | 21% | 12% |
| France | 12% | 22% | 10% |
| Netherlands | 26% | 35% | 9% |
| England | 12% | 16% | 4% |
| Turkey | 7% | 9% | 2% |
| Russia | 11% | 10% | -1% |
| Switzerland | 25% | 22% | -3% |
| Spain | 22% | 16% | -6% |
| Scotland | 16% | 5% | -11% |
| Average | 26% | 38% | 12% |

Source: UEFA Club Football Landscape Reports

**Scottish clubs have generated less transfer income from the sale of domestic players than other comparator countries since 2020**
Transfer income from the sale of domestic players (€m), selected countries with under 10 million population



**Achieving the Incentives**

It is important to highlight that it is not enough for a club simply to have an academy and promote young players to the 1st team, should they wish to improve both performances on the pitch and results on the balance sheet. Section 3 of this report, which focuses on the Trends in Success, can provide more insight into the patterns which emerge regarding some of the clubs mentioned above. Furthermore, we will discuss in greater depth several critical factors to be considered at board level to implement and achieve such a strategic approach in Section 4.

Summary of Section 1

- Data shows that clubs who follow a board-level strategic approach, centred around the development of a well-functioning academy and the promotion of young players to the 1st team, can simultaneously achieve the following three outcomes:
    - Improved Results
    - Decreased Expenditure
    - Increased Revenues

- Data also shows that Scottish clubs are significantly behind their European counterparts in implementing a financial model centred on player trading, leading to a strain on resource across our game, and a lack of reinvestment in all areas, including staff development, facilities, and 1st team performance.

- Our proximity to the English Premier League creates significant opportunity for clubs who embrace such a financial model.

# Section 2.

## The Issue

While Section 1 highlighted the clear incentives for any club which focuses on making an effective youth development system a central part of their overall strategy, Section 2 will focus on 'the issue' within Scottish football. Several data points highlight the extent of this problem.

**Example 1 – 'Does Age Influence Opportunity?'**

This graphic compares leagues with different numbers of teams, therefore the total figure should be divided by the number of teams to understand the average number of U20 minutes per team (below).

SPFL Prem – 578; English Premier League – 605; La Liga – 651; Danish Superliga – 1,310; Eredivisie – 1,645

Therefore, it shows that the average team in the world's two strongest leagues (La Liga and English Premier League), provides more minutes to players under the age of 20, than teams in the Scottish Premiership. This highlights the fact that the problem we face is contextual to Scotland, rather than being a result of our top division being too high of a level for young players to feature.

As a direct comparison with a European country with almost identical population to Scotland, and an even more competitive league structure (12 teams but with two automatic relegation places), the Danish SuperLiga is second on the above graphic, with more than double the U20 player minutes. Once again, we can see that the problem is Scottish in nature, rather than being down to size of population or league.

*Source: @c_campbell18 via X / Transfermarkt Data*

## Example 2 – 'Percentage of Minutes By U21 Footballers'

On the right we have provided the percentage of minutes by U21 players, per team, in the SPFL Premiership so far in the 2023/24 season.

Below we have selected the Croatian and Danish top-tiers due to being similar in population and being even more competitive in league structure (10 teams in Croatia, 12 teams with two automatic relegation places in Denmark).

As we can see, significantly more young player minutes have been accumulated in comparable countries.

To further illustrate what was discussed in Section 1 of this report, Dinamo Zagreb and FC Copenhagen have both accumulated more U21 player minutes than any Scottish club this season, Both are reigning champions of their league and participated in European competition (with Copenhagen qualifying to the knockout stage of the UEFA Champions League). This again shows that the lack of minutes for young players in Scottish football is not because playing young players results in worse performance, because of the size of our country, or because of the structure of our leagues.

**Percentage of minutes played by U21 footballers**

Domestic league matches, 03/04/2023 - 02/04/2024

**Select ->** SCO (Premiership)

| U21 | Club | U19 |
|---|---|---|
| 17.1% | Motherwell FC (SCO) | 3.6% |
| 13.4% | Dundee FC (SCO) | 0.0% |
| 12.4% | Hibernian FC (SCO) | 1.5% |
| 9.5% | Kilmarnock FC (SCO) | 7.9% |
| 6.1% | Ross County (SCO) | 1.6% |
| 5.8% | Heart of Midlothian (SCO) | 0.5% |
| 5.7% | St Johnstone FC (SCO) | 1.0% |
| 5.5% | Rangers FC (SCO) | 0.2% |
| 2.7% | Aberdeen FC (SCO) | 0.1% |
| 1.5% | St Mirren FC (SCO) | 0.5% |
| 0.9% | Celtic FC (SCO) | 0.3% |
| 0.1% | Livingston FC (SCO) | 0.0% |

| U21 | Club | U19 |
|---|---|---|
| 23.9% | Lokomotiva Zagreb (CRO) | 5.3% |
| 18.6% | Dinamo Zagreb (CRO) | 0.1% |
| 18.3% | NK Rudeš (CRO) | 0.4% |
| 16.7% | Hajduk Split (CRO) | 2.8% |
| 14.2% | NK Osijek (CRO) | 2.4% |
| 11.0% | HNK Rijeka (CRO) | 0.0% |
| 9.6% | Istra 1961 (CRO) | 0.2% |
| 9.1% | HNK Gorica (CRO) | 0.9% |
| 8.8% | Slaven Belupo (CRO) | 1.1% |
| 4.1% | NK Varaždin (CRO) | 0.5% |

| U21 | Club | U19 |
|---|---|---|
| 26.9% | FC Nordsjælland (DEN) | 6.9% |
| 24.7% | FC København (DEN) | 7.5% |
| 23.4% | Odense BK (DEN) | 11.1% |
| 20.4% | Lyngby BK (DEN) | 1.5% |
| 18.4% | Randers FC (DEN) | 2.5% |
| 17.1% | Viborg FF (DEN) | 0.3% |
| 15.6% | Vejle BK (DEN) | 1.3% |
| 8.9% | Silkeborg IF (DEN) | 0.1% |
| 8.2% | FC Midtjylland (DEN) | 0.1% |
| 4.9% | Hvidovre IF (DEN) | 1.9% |
| 1.9% | AGF Aarhus (DEN) | 0.2% |
| 1.7% | Brøndby IF (DEN) | 1.1% |

*Source: CEIS Football Observatory*

## Example 3 – Comparison with Top 5 Leagues

In the above table, we can see that only 3 of the 12 clubs involved in the Scottish top-tier achieved higher than 10% of player minutes being played by U21 footballers.

In the table on the right, we can see that a number of clubs are able to achieve this, even when competing in the Top 5 leagues.

Included in this list are some of the world's biggest clubs.

This once again shows that Scottish football is significantly behind on young player minutes, even compared to leagues of a much higher standard, and to clubs which face more intense fan and media pressure for results.

*Source: CEIS Football Observatory*

**Percentage of minutes played by U21 footballers**

Domestic league matches, 03/04/2023 - 02/04/2024

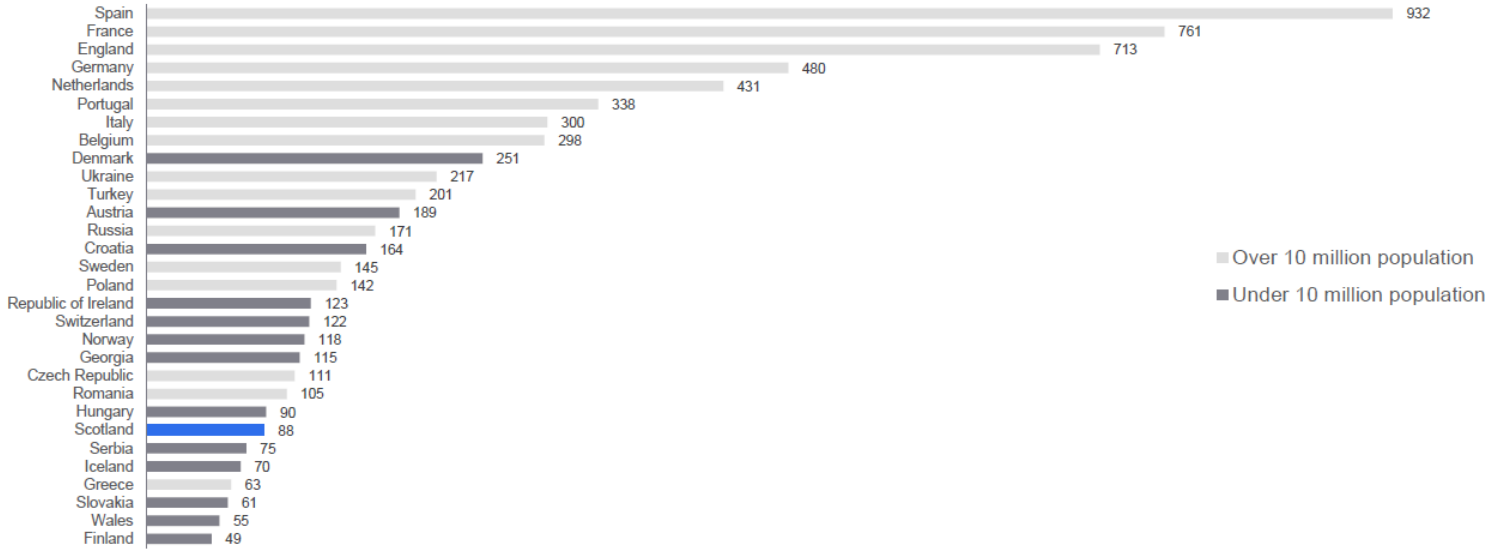
**Select ->** European big-5 leagues

| U21 | Club | U19 |
|---|---|---|
| 26.8% | RC Strasbourg (FRA) | 2.3% |
| 23.2% | Olympique Lyonnais (FRA) | 6.0% |
| 22.0% | FC Barcelona (ESP) | 9.0% |
| 16.5% | Brighton & Hove (ENG) | 6.4% |
| 15.6% | Valencia CF (ESP) | 0.7% |
| 14.2% | Girona FC (ESP) | 0.1% |
| 13.2% | FC Lorient (FRA) | 2.9% |
| 13.1% | Toulouse FC (FRA) | 9.1% |
| 12.0% | FC Metz (FRA) | 1.6% |
| 12.0% | RB Leipzig (GER) | 0.0% |
| 11.8% | Manchester United (ENG) | 3.3% |
| 11.1% | Chelsea FC (ENG) | 1.0% |
| 10.7% | Stade Rennais (FRA) | 7.3% |
| 10.6% | Borussia M'gladbach (GER) | 0.2% |
| 10.6% | LOSC Lille (FRA) | 7.0% |
| 10.1% | Bayern München (GER) | 1.9% |

## Example 4 – Market Value of Young Scottish Players

**The market value of Scotland's under 23 players is just £88m, putting them 24th in Europe and 9th among countries with <10 million people**

Market value (£m) of under-23 players, top 30 European countries. Market value as estimated by Twenty First Group player valuation model

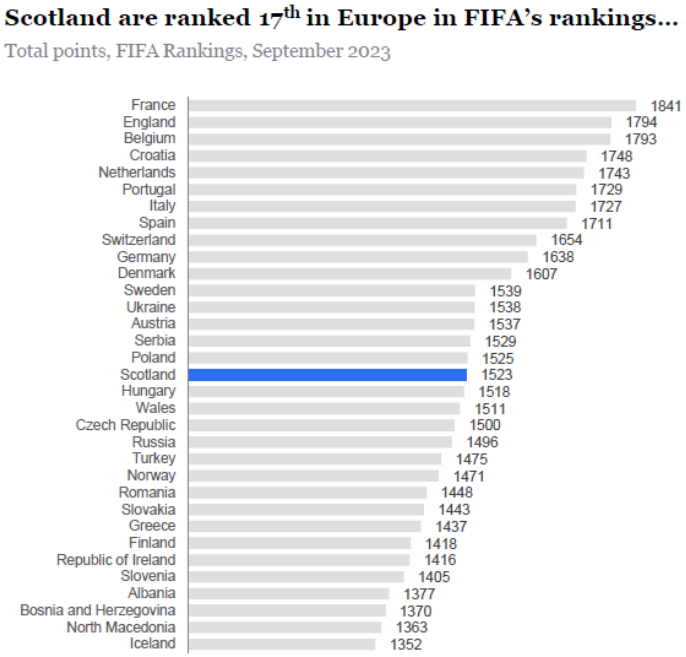


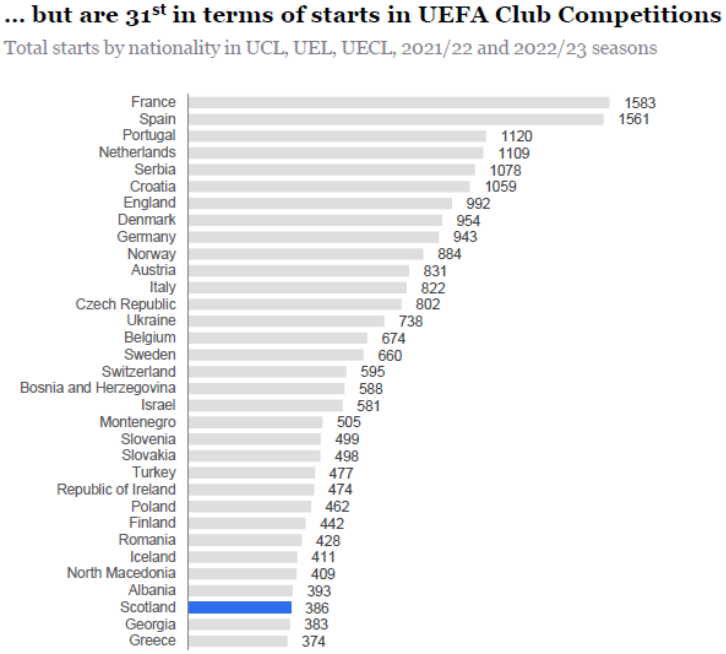

Notably, the market value of young Scottish players is not only significantly lower than Europe's top nations, but also than comparable countries with less than 10 million in population, who are not traditionally (in recent decades) some of Europe's most successful nations, including: Republic of Ireland, Norway, Georgia and Hungary.

This shows that Scotland is not only falling behind the top nations in player development, but also behind nations that we should realistically expect to compete against.

Source: 21st Group

## Example 5 – Starts in UEFA Club Competitions




The above table shows that while Scotland ranks 17th in Europe in the current FIFA rankings, which is partially a reflection on the strength of the starting 11, we are 31st in terms of players starting in UEFA Club Competitions, which shows that we are producing a significantly lower volume of players who playing at the highest levels of the game.

Once again, Scotland not only falls behind the top European nations in this regard, but also countries with considerably smaller populations, such as:

Bosnia (circa 3.5m)

Montenegro (circa 600k)

Slovenia (circa 2.1m),

North Macedonia (circa 2m)

Albania (circa 2.7m)

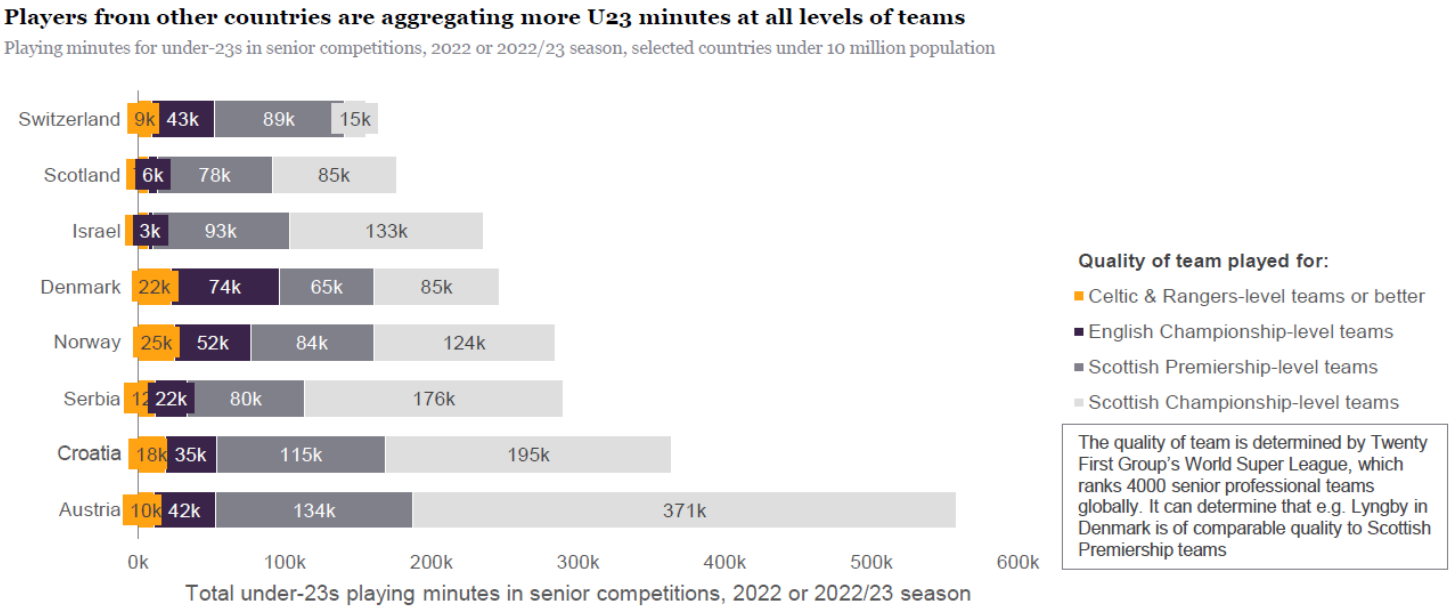
Iceland (circa 380k)

...and countries without significant football success in recent decades (for example Norway, Israel, Slovakia, Finland).

Notably this data also shows that quality of facilities, infrastructure, lack of resource and lack of footballing history are not the factors responsible for Scotland's decline, given the circumstances of several nations mentioned above.

Source: 21st Group

## Example 6 – U23 Minutes Across All Levels




Finally, the above graph shows that Scotland falls behind in young player minutes against comparable countries at all levels of the game. This contradicts statements made during our consultation within Scottish Championship clubs, which indicated their belief that their league was aggregating a high number of young player minutes, and that the issue existed only within the Scottish Premiership.

Source: 21st Group

**Example 7 – U21 Minutes 2023/24 Season**

As part of our internal research for this project, a detailed data collection was undertaken for the 2023/24 season to measure a number of metrics. A full breakdown is included as an Appendix to this report.

On the right, a full breakdown of U21 minutes is provided. Please note that due to the timing of this report, these totals refer to the first 33 games of the league season.

Of note, only one Scottish club achieved more than 3,000 minutes (with Dundee reaching 3,538), and the closest club (Aberdeen) reaching only 2,290.

As a direct comparison with a 33-game league which is ranked very similarly in terms of level, we analysed the Hungarian league in 2022/23. Honved had 6, 544 minutes, PAFC reached slightly more than 5,000 minutes, and two more clubs achieved over 3,000 minutes (Vasas and Mezokoveszd). The Hungarian league is a 12-team league with 2 automatic relegation places, meaning the league size is more competitive than the Scottish Premiership.

Minutes Played
By U21 Scottish Players For Their Club

| U21 Scottish Players - 1st Team Minutes | | |
|---|---|---|
| | Total Minutes Played | Equivalent 90-Minute Games Played |
| Aberdeen | 2,290 | 25.4 |
| Celtic | 89 | 1.0 |
| Dundee | 3,538 | 39.3 |
| Hearts | 1,574 | 17.5 |
| Hibs | 538 | 6.0 |
| Kilmarnock | 2,080 | 23.1 |
| Livingston | 584 | 6.5 |
| Motherwell | 1,865 | 20.7 |
| Rangers | 26 | 0.3 |
| Ross County | 1,320 | 14.7 |
| St Johnstone | 547 | 6.1 |
| St Mirren | 650 | 7.2 |
| TOTALS | 15,101 | 168 |
| League Average | 1,258 | 14 |

It should be noted that these top-division figures only reveal a small part of the story, because clubs in Hungary have an established Cooperation system with clubs in the 2nd Tier, B Teams in the 3rd Tier, and a rule that every team in the 2nd and 3rd tier respectively must have a U20 and U19 Hungarian player on the field at all times. Without these regulations and initiatives in place, the overall difference in U21 player minutes across all levels of senior football would make for an extremely worrying comparison.

As one of the authors of this report was Sporting Director at the Hungarian club with the most young player minutes, and also has years of experience working within the Scottish game, it can be stated from anecdotal experience that Hungary does not possess more talent or potential at youth academy level. Therefore, we can once again suggest that, while controlling for a range of other factors, a specific issue exists within the Scottish game as to why young players are not afforded the opportunity to play.

## Summary of Findings in Section 2

During our consultations with board members, 1st team staff, and Academy Directors working at the 'coal face' of Scottish football about the reasons there are a lack of opportunities for young Scottish players, the following reasons were highlighted on a number of occasions:

1. Experienced Players Achieve Better Results
2. The Short-Term Tenure of the Head Coach
3. Pressure from Fans
4. Size of the Leagues Being Too Competitive
5. Size of Talent Pool
6. Lack of Resources
7. Lack of Infrastructure / Facilities
8. Belief that Below SPFL Premiership, a High Number of Young Player Minutes Existed

While Section 1 of this report has already addressed point 1 to be factually incorrect, and while point 2 will be discussed in Section 4 - briefly, coaches around Europe do not have a longer average tenure than in Scotland – all of the other points mentioned above have been shown throughout Section 2 of this report as not being the main reasons for the deficit in young player development. This report clearly shows that Scotland is behind comparable countries who face either similar, or even bigger challenges in each of the points mentioned above.

The only logical conclusion to the above is that Scottish football is significantly underachieving its potential in player development due to one of the three frequently mentioned factors in our consultations with clubs (discussed later in this report in more detail):

1. Gap Between Academy and 1st Team
2. Lack of Strategy at Board Level
3. Issues in Youth Development Phase

In short – either the talent exists inside the youth development system, but is being denied opportunity in the transition phase due to the lack of strategic approach taken within clubs or the lack of overall structure which allows young players to participate in the professional leagues; Or, alternatively, clubs are ready to give opportunity to young players, but deem that there are no players with potential inside their system. If the latter would be the case, that would mean that Scotland is outperformed in youth development by a number of countries with smaller populations, less resources, and worse infrastructure.

As a final possibility, the problem exists due to a mixture of the above factors.

The positive which can be placed upon this perspective is that all of the aforementioned issues are within the combined control of Scottish football to improve, should they wish to capitalise on the incentives discussed in Section 1 (better results, lower expenditure, and higher revenues).

Therefore, this section concludes by stating that the reality surrounding the development of young Scottish players, by a number of measures and controlling for a range of possible factors, is a clear cause for concern.

The authors hope that the data provided within this report can be used as a cause for reflection on current processes, and a critical catalyst for much-needed improvement across our game.

# Section 3.

# Trends in Success

## 3.1 Trends in Individual Player Success

### Reverse Engineering & Importance of Early Exposure to Senior Football

In order to ascertain how to improve the development of Scottish players during the transition phase, it is important to first understand the patterns which emerge in the journey of elite players.

With this in mind, reverse engineering is a useful tool, to study players who have gone on to have a successful career by working backwards to understand what trends emerge in their development.

On the right, we can see a quote from Ralf Rangnick, referring to the trend that around 80% of players competing at the quarter-final stage of the Champions League are not playing age-group football by the age of 17. This insight provides a strong suggestion that early exposure to senior football plays an important role in the player going on to have a career at the elite level.

Another interesting trend observed in the Red Bull study is that this early exposure to senior football does not always occur in the 1st team of the contracting club, nor does it necessarily have to be in the top tier division of the country.

> "Our scouts at Leipzig spend the day watching videos of first-class players, consecrated, when they were 16. To see what process they followed in their development. Two years ago we did an analysis among the clubs that reached the quarter-finals of the Champions League: 80% of the 200 players participating, at the age of 17, only played in adult categories. If you translate this data, it means that a top-notch talent, at 17, should not be playing under-19s. If you can't afford to compete with professionals at your club, lend it to another Second or First club. That's the secret to Salzburg's success. In Portugal the same thing happens: youths can play in the Second Division. That's why Porto, Sporting and Benfica produce so many top-notch talents."
>
> - Ralf Rangnick on a study commissioned by the Red Bull group.

Below, we can see 4 tables which have been designed to bring more context to our situation.

In Table 1, we can see a list of Scottish raised players who are currently contracted to a team in one of the Top 5 leagues.

| NAME OF PLAYER | AGE AT SENIOR DEBUT | LEVEL & CONTEXT |
|---|---|---|
| BILLY GILMOUR | 18 | Chelsea, English top tier |
| JOSH DOIG | 17 | Loan to Scottish League 2 at 17, Premiership debut at 17 |
| CALVIN RAMSAY | 17 | SPFL Premiership |
| NATHAN PATTERSON | 18 | SPFL Premiership |
| AARON HICKEY | 16 | SPFL Premiership |
| LEWIS FERGUSON | 18 | SPFL Premiership |
| BEN DOAK | 16 | SPFL Premiership debut at 16, English top tier debut at 17 |
| ANDY ROBERTSON | 18 | SPFL League Two debut at 18, Premiership debut at 19 |
| KIERAN TIERNEY | 17 | SPFL Premiership |
| JOHN MCGINN | 18 | SPFL Premiership |
| RYAN CHRISTIE | 18 | SPFL Premiership |

In Table 2, we looked specifically at Croatia as the top benchmark, because they are the most successful comparable nation in Europe with less than 10 million in population (actually having a population smaller than Scotland). Included are the 6 most decorated / valuable individual players at club level from their last generation.

| NAME OF PLAYER | AGE AT SENIOR DEBUT | LEVEL & CONTEXT |
|---|---|---|
| LUKA MODRIC | 17 | Loan to Bosnian top tier at 17, loan to Croatian top tier at 18 |
| IVAN PERISIC | 18 | B Team of Sochaux in 3rd tier of French football, loan to top division in Belgium at 20 |
| JOSIP GVARDIOL | 17 | Handful of games in B Team in Croatian 2nd tier at 17, debut for A squad in top tier at 17 |
| MATEO KOVACIC | 16 | Croatian top tier |
| IVAN RAKITIC | 17 | Turned down top European clubs at 16 to get early exposure to 1st team football at Basel – debut in B team in lower tier at 17, top-tier debut at 18 |
| MARIO MANDZUKIC | 18 | Croatian top tier |

In Table 3, we took the two highest-value players according to Transfermarkt in several other comparable nations (Hungary, Norway, Denmark).

| NAME OF PLAYER | AGE AT SENIOR DEBUT | LEVEL & CONTEXT |
|---|---|---|
| MILOS KERKEZ | 16 | Hungarian 2nd tier, debut in Dutch top tier at 18 |
| DOMINIK SZOBOSZLAI | 16 | Debut at cooperation club in Austrian 2nd tier, top-tier debut at 17 |
| ERLING HAALAND | 15 | Norwegian 5th tier debut at 15, debut in 2nd tier at 15 |
| MARTIN ODEGAARD | 14 | Norwegian 4th tier debut at 14, debut in top-tier at 15 |
| RASMUS HOJLUND | 17 | Danish top tier |
| ANDREAS CHRISTENSEN | 18 | Chelsea debut at 18, followed by 2-year loan for regular minutes in German top tier |

In Table 4, we summarized the journey of a group individuals we spoke to during the consultation phase, who currently either work at 1st team level within the Scottish game, or in a leading academy role, who themselves were capped at 'A' Squad International level.

| NAME OF PLAYER | AGE AT SENIOR DEBUT | LEVEL & CONTEXT |
|---|---|---|
| STEVEN NAISMITH | 17 | SPFL Premiership |
| CALLUM DAVIDSON | 18 | Scottish 2nd Tier |
| ANDY WEBSTER | 16 | Scottish 3rd Tier |
| LEE WALLACE | 17 | SPFL Premiership |
| CRAIG LEVEIN | 16 | Scottish 3rd Tier |
| ANDY KIRK | 16 | Northern Irish top tier |
| DON COWIE | 18 | Scottish 2nd Tier |
| DEREK MCINNES | 17 | Scottish 2nd Tier |
| CHRIS BURKE | 18 | SPFL Premiership |
| JOHN KENNEDY | 16 | SPFL Premiership |

## Summary of Reverse Engineering

Based on a summary of all four tables outlined above, one striking pattern is that no player listed in this analysis made their senior debut older than the age of 18. This, combined with the aforementioned 'Red Bull study', suggests several interesting implications regarding elite player development, including:

- The value of academy age-group football beyond a certain age.
- Whether the 'Transition Phase' being defined, for our purposes, as players aged 16-21 is appropriate, and should instead focus on the 16-18 age range.
- Whether studies defining 'young players' as U21 are appropriate – for example, studies on the number of senior minutes played by Scottish U21 players – and whether such studies should focus on U19 players as more appropriate insight on the development of players with the potential to play at the elite level.

A range of other interesting trends emerged as part of this research and are covered in the pages below.

**Pathways Between Academy & Top Division**

It is also notable that the first exposure to senior football varies greatly across the four tables – with some players making their senior debut in a top 5 league, but 15 of the 33 players picking up their first experiences in the lower tiers of their country's professional pyramid. Therefore, early exposure to senior football appears to be a more important trend than the level of senior football itself.

Within our consultations, every Scottish-raised player who participated in the competition felt that the old Reserve system was a valuable part of their development as it facilitated playing both with and against senior players at an early stage. However, they felt the current Reserve system was not fit for purpose.

With this in mind, it seems that since the fall of the old Reserve system, Scottish football has been behind comparable nations in purposely establishing pathways for players in the transition phase (e.g. B Teams, Cooperation Clubs, Strategic Loans). However, in circumstances where this has occurred within the Scottish context, player development appears to have flourished.

Indeed, a 2023 study by Ayr United FC found that 38% of Scottish raised players in the current National 'A' Squad have featured at some point in the professional pyramid below the SPFL Premiership, with 33% making their debut below that level.

Another interesting trend from our consultations was that, while not all, *a number of players who went on to have a high-level career struggled during their first loan, or earliest introductions to senior football*. There exist a number of examples of 'A' National Team players either going on loan without receiving much game time, or performing at a level the club was not happy with during the early part of their adaptation. This trend suggests several important implications:

> "Those [difficult loans] were experiences for me.. Experiences of being on the bench.. I kind of had to wait for that chance, and when it came I took it with both hands."
>
> - Harry Kane

1- That even 'unsuccessful' early exposure to senior football is more beneficial to elite development than 'successful' age-category academy performance (e.g. U19, U21, etc)
2- Parent clubs that send young players on loan to a senior environment with guarantees, clauses, or financial penalties around playing time are potentially harming the development of the young player – it appears better to let the player go and earn their place within a senior environment where they have a realistic chance to play than to keep them at the parent club (unless they are featuring in the 1st team).
3- That players with potential to feature at the elite level often require an adaptation period to show their potential within senior football and should not be written off too early.

It was also notable that an anomaly existed in Norwegian football, which developed two of the world's best players in recent years in Erling Haaland and Martin Odegaard. In their cases, they featured in senior football in the equivalent of our League 2 and Lowland / Highland Leagues at the ages of 15 and 14 respectively, and both had featured within the top two divisions by the age of 15 (including Odegaard in the top division).

## The Cause & Effect Dynamic

Another interesting trend from this research was that, both when consulting with individuals with years of experience in player development on their observations, and when directly interviewing individuals who played at 'A' National Team level, a large percentage were not deemed as the most 'talented' players at academy level. Indeed, on several occasions, the importance of certain circumstance (discussed below) that allowed early exposure to senior football was highlighted as the key factor that allowed the individual in question to overtake their peers.

Therefore, it is important to note that the observed trend was not(!) that the most talented players from younger age groups went on to feature in senior football and then went on to play 'A' Squad international football; on the contrary, it was playing senior football at a younger age that served as a major catalyst for their career trajectory thereafter.

As one contextual example, from the Scotland Youth National Team squad which reached the semi-finals of the U17 European Championships in 2014, the total number of 'A' Squad caps achieved by all members of the squad put together currently stands at 0. In comparison, nations who have implemented a 'Future Squad' programme, focused on players who were not deemed to be 'currently ready' for the traditional National Youth Team, have seen a number of players transitioning to the 'A' National Team.

To highlight the above, a number of the players listed in the 4 tables at the beginning of this section faced one or more of the following challenges at Academy level:

1- Player was not selected for Youth National Teams at younger ages.
2- Player featured at a younger age category within their academy due to struggling to make an impact with players of their chronological age.
3- Player was released from an elite academy.
4- Player considered another career outside of football before making breakthrough.

This dynamic poses several key implications for elite player development:

1- The danger of teenage players believing they are one of the most 'talented', or receiving preferential treatment by the academy, as this often leads to a reduction in motivation and being overtaken by other players at the transition stage.
2- The development journey of a young player is extremely unpredictable, and therefore we should never speak with certainty about a player's potential, either when referring to those who are performing extremely well, or those who are performing below the level of their teammates.
3- The selection process of both International Youth Team Squads and Elite Academies contains bias based on current performance levels, rather than future potential.
4- The need for more focused attention on the Growth Maturation process.
5- The stage between the age 16 to 18 could justifiably be labelled the 'golden age' for exposure to senior football for elite player development – talented players who miss this window often fall behind their peers who are afforded such opportunities.

## Importance of Circumstance

As has been discussed previously, young players who are afforded early exposure to senior football have a greater chance of becoming an elite player, even when they were not deemed the most 'talented' player within the academy.

We have summarised below the main 'circumstances' which have been mentioned during our consultations as reasons that the players listed in the 4 Tables at the beginning of this section received early exposure to senior football.

1- The Head Coach / Manager of the club had strict instructions to involve young players from the strategy set at Boardroom level.
2- The club had financial circumstances which meant they could not sign experienced players, and thus were forced to develop academy prospects in the 1st team.
3- The club had a number of injuries in the position, which led to the young player getting the opportunity to play.
4- The league had rules or quotas which protected the development of young domestic players.
5- On several occasions, players mentioned that they felt "lucky" the club was not one of the top clubs in the country / not competing in the top division during the time they came through, as they believed it gave them more opportunity to play.

The main implication of this trend is that the player being "so good that they had to play" – while it does exist in a small number of cases - is not a commonly observed reason for young players getting early exposure to senior football. Therefore, senior football can be seen as the tool for stimulating the development of young players, rather than the reward for their performance in the academy.

In addition, alarmingly, only point 1 on the above list has been intentionally influenced by the club.

Given that every player in the 4 tables listed at that start of this section has either been transferred to a Top 5 league, featured at 'A' International Level or had a decorated individual career – the question must be raised – what would have happened to those players without any of the circumstances listed above?

Given the clear trend on the importance of early exposure to senior football, we can theorise that a number of the players listed would have not achieved such levels, had at least one of the 5 points listed above not existed at their club during the period of their development.

> "Many talented youngsters waste their time on the benches of top teams instead of gathering experience on the pitch."
>
> - Arsene Wenger, FIFA Study on Talent Development

With this in mind – how many players are lost to the game every season due to the lack of intentionally designed opportunities, who otherwise might have had the potential to play at 'A' Squad International level?

## Family Influence & Player Mentality

During our consultations, the influence of the player's family dynamic and the mentality of the player were frequently mentioned as important factors in the player's development.

Interestingly, when speaking with those who were assessing the trends from a position of player development (either Academy Directors or 1st Team Coaching Staff), the importance of having an emotionally balanced and stable family support system was commonly discussed.

However, conversations with several individuals who themselves played at 'A' International Level revealed that they had a parent or older mentor who used a form of 'tough love' which they felt pushed them to succeed; in spite of it being difficult to handle 'in the moment'. This also aligns with many other success stories of those individuals considered the very best in their industry not only within football, but also other sports, and other industries as a whole, where circumstances include either a parent who pushed them to succeed, leaving their family behind at a young age to pursue excellence in their field, or some form of trauma in early life.

Therefore, an interesting dichotomy exists which also correlates with academic research in the area: if the individual does not have sufficient challenge in their life, they will not be able to grow from the experience, but if the individual lacks sufficient support to eventually overcome these challenges, they are likely to suffer negative consequences. Therefore, both have a part to play in the development of the elite player. One question which this topic raises is whether the workings of the Scottish system have created a bias towards selection of those players from a highly supportive environment, rather than finding the ways to adequately support those from a highly challenging environment – who often go on to fill the top 1% of their field.

It was also stated, almost unanimously in our consultations with those involved in player development in Scottish football, that the players who went on to have the best careers were harder working than their peers and possessed a mentality that pushed them to succeed.

Again, this is not a surprising trend, given that individuals who possess higher levels of resilience and conscientiousness tend to do better across all industries (according to research). One question that stems from this is how to intentionally create a development environment which fosters these qualities.

On the flip side, it was notable that not a single example existed within our consultations with those individuals working in Scottish football which referenced a talented player who came from a broken home / poor background, who was difficult to manage for coaches but was supported through the system and on to a top-level career. Given the number of top-level players globally come from a similar background to the one described, it also raises the question as to whether the workings of Scottish system allow for the development of the 'maverick'.

"It's also the final mental hurdle, and that's where we see the final part, I think, of the development of a player. It is a combination of motivation, stamina and being able to survive disappointment and analysing my own game. That's where I slowly become an adult. Do I analyse well what's happening to me? Can I resist disappointments? Can I bounce back from disappointments? I would say on top of this, to all these questions "we" as the football world don't help players in this phase well enough."

- Arsene Wenger on the transition to senior football and the need for clubs to provide more support on developing the necessary resilience which has been highlighted as a key trend in our consultations

Therefore, this topic raises several implications:

1- The importance of parental influence on the career of the player, and the need for both clubs and the Scottish FA to take a more proactive approach to communication with, and education of, parents of elite players.
2- Due to the frequently stressed importance of developing habits resembling an elite mentality, coaching from a Performance Psychologist can play an important role in elite player development.
3- From our consultations, within the last Scottish raised generation of players, we are lacking examples of the 'maverick' or player from a troubled family background making it through to the top level, in favour of players who are more 'coachable'.

**Transition to 1st Team Being Managed Appropriately**

While early exposure to senior football was the main trend in the players we studied, it was also interesting to note that several players / player development experts mentioned the importance of managing this transition appropriately. A number of players mentioned that they were either:

1- Phased in to starting consistently for the 1st team gradually over a period of time.
2- 'Dipped in and out' of the 1st Team during their initial period of exposure to senior football.
3- Acclimatised to playing senior football at a lower level of league before progressing to the top tier.

> "I know that I cannot put [an academy player who is on the cusp of the first team] to start and play 90 minutes every game, otherwise I will burn him alive."
>
> - Head Coach of club competing in European Competition

The above also correlates with research the increased risk of physical injury / psychological breakdown if the acute jump in intensity is too much too soon. Therefore, while the clear trend in elite development requires early exposure to senior football, a jump from playing academy football to immediately starting every game and playing 90 minutes without rest in the top division also poses risk.

In this case, the expertise of staff members at the club is important to manage the player's development optimally.

> "We have to protect him from over exposure."
>
> - Then-Everton Manager David Moyes on his management of teenage sensation Wayne Rooney

## Continued Work on Technique / Fundamentals

During our consultations, the importance of continued work on technique / positional fundamentals once the young player becomes part of a senior squad was highlighted on a number of occasions.

Within the Scottish context, a former Rangers player we spoke to referenced the example of Gennaro Gattuso, one of the most decorated players to have participated in Scottish football (two UEFA Champions League winners medals and one FIFA World Cup winners medal). While not deemed as one of the most talented young players in Europe at the time, his incredible desire to improve was highlighted, often spending 90 minutes after training every day perfecting his technique against a wall with both feet.

Someone close to the situation gave the example of the two players who have gone on to play at the highest level of the game in the past 20 years of Celtic's history – Kieren Tierney and Virgil van Dijk – as both requiring, and committing to, continued work on the fundamentals while playing for the 1st team. Meanwhile Shinsuke Nakamura, who was regarded as one of the best free-kick takers in the world, was known for his relentless repetition and work ethic after team training.

Within British football in general, perhaps the best example is detailed in the 'Class of 92' documentary (referencing Manchester United's famous generation), which outlines a daily commitment to additional practice by each member of the group, who also provided a practice partner and supportive influence for the other members of the group.

As one of the authors of this report has previously conducted extensive research into player development, we can confirm that this correlates with a significant number of documented examples around the globe of young players who reached the top level of the game, staying back after regular team training, to perfect the fundamentals of their game. While such isolated / unopposed training may be seen by some players as 'boring', the consistent trend across top players from all continents, as well as top athletes from different sports, is that they develop the mentality to consistently focus on perfecting the basic details of their game.

> "Forget all the nonsense about altering training programmes to keep players happy. The argument that they must be stimulated by constant variety may come across as progressive and enlightened but it is a dangerous evasion of priorities. In any physical activity, effective practice requires repeated execution of the skill involved. You need to concentrate on refining technique to the point where difficult skills became a matter of habit."
>
> - Sir Alex Ferguson

Therefore, how can this process be intentionally developed? While the trend for employing such professionals is increasing within Scottish football, it can be noted that there has been a trend for top clubs around Europe to employ either an Individual Development Coach, Transition Coach, or similar, within their 1st Team Staff, who is responsible for coordinating such trainings with young players at the club.

Everyone that was consulted for this report who has experience in a system with this type of specialist staff member, believed it offered significant benefit to the young players at the club when correctly implemented. This is discussed further in Section 4.

## The 'Supercompensation' Effect

During our consultations, circumstances which can be categorised as triggering the 'Supercompensation' effect were mentioned a number of times.

Supercompensation refers to the adaptation within the body to get stronger depending on the level of stress faced in the environment. This applies not only to physical stress, but also psychological stress, and the development of skilled performance within sport.

Research on the 'little sibling' effect has shown that younger siblings are much more likely to become elite athletes than first-born children, due to several factors, including – modelling performance based on watching their more advanced older sibling, taking part in more informal play by joining in with their older sibling, and crucially, by having to constantly compete with more skilled performers. Often, those who did not have an older sibling referenced experiences of competing (formally or informally) against older children at a young age.

Similar effects can be seen in studies showing the 'Reverse Relative Age Effect' – the advantage of chronologically older children is well understood in youth sports – but children born later in the year who make it through to the professional level appear to have some benefit from constantly competing against older peers.

Logically, the same effect applies to players who are physically weaker, or those who go through the Growth Maturation phase at a later stage. For example, players at the top level of the game who are not particularly strong or quick are often noted for their exceptional awareness and technical skill – a case of having to 'Supercompensate' for their weaknesses during their development journey.

This topic provides several possible implications:

1- The role of the 'Supercompensation' phenomenon in Talent Identification of academies.
2- Care must be taken with the early physical maturer to ensure they are challenged in ways that do not allow them to use their physical advantages to achieve success during their development.
3- Care must be taken with late-maturing players, who may exhibit lower performance levels during their development, but may develop skills which allow them to excel after maturation.
4- In a development system which has been designed to bracket players according to age-category, it would be wise to design strategies based on the optimal challenge point of each individual player (whether playing up or playing down). This also implies potential benefit to training opportunities with older players, *particularly before puberty*, when there is less physical risk.
5- We must note that special care must be taken during the growth spurt, as increasing the intensity of training during this sensitive phase by playing or training with older players can have unintended negative effects (such as slowing the rate of growth or increasing the risk of injury).

## Senior Opportunity Coming in a Different Position than Academy Football

As one of the final points on the development of the individual player, it was mentioned in a number of cases that the opportunity for a young player to gain early exposure to senior football may not necessarily be in the same position that they have occupied within the academy. This can occur for a number of reasons, including:

1- The 1st Team Coaching Staff feeling that the player is better suited to a different role within their system than academy staff.

2- Injury, suspension, or lack of quality in a certain position opening the space to play.

3- Moving the young player to a position where the team is less likely to suffer negative consequences if a mistake is made (e.g. moving a central defender to fullback or a number 10 to a wide midfield position for the initial period of adaptation to senior football).

With this in mind, the clear implication is that academies would be well-advised to refrain from focusing overly on position-specific training with young players, and where possible, develop individuals who have the ability to play in several positions. There is also an implication towards the benefit of a board-led 'Sporting Director' model with a high level of technical expertise, to help anticipate and prepare the pathway of the player in advance of the 1st team.

## Importance of Physical Development / Readiness

Within the consultations undertaken with 1st Team Managers / Head Coaches working Scottish football, a frequently mentioned trend in players who were given early exposure to senior football was their physical readiness to compete in the style of football that exists within the pyramid.

As a supplementary factor, a concern which was frequently mentioned by stakeholders was the level of expertise in appropriate physical development within our Elite Academies.

This report acknowledges the need for improved quality of work in the physical preparation of young players at several stages:

1- Improving the coordination and fundamental movement skills of players during the Grassroots and 'Children's Academy' stage.

2- Improving the quality of work specific to the individual during the Growth Maturation phase, including recognizing the need for tailoring the training volume of the individual, and interventions in biomechanical issues identified via a Functional Movement Screen.

3- Improving the individual development plan for players in the post growth spurt period, to ensure they are ready for the demands of senior football and reduce the occurrence of preventable injuries.

## Impact of Early Migration

Another increasing trend within the Scottish footballing context is the number of players leaving Scotland before the age of 18.

A recent ECA study on this topic highlighted the challenge facing the majority of players who chose the leave their country of development between the ages of 16-17 years. The study looked at 1,223 players. The findings are summarized below.

- Only 13.1% played in the recruiting club itself by the age of 23.

- Of the 1,223 players included in the study, only 23 went on to play more than 50 matches for the signing club.

- 81.6 % of players who left their home country before the age of 18 had made no professional appearances before the age of 19 – an extremely worrying trend given the previously discussed importance of making a senior debut before the age of 19.

- In 80.0% of cases, the sporting level of the clubs of the players studied at the age of 23 is lower than that of the clubs that recruited them as minors.

- Only 4.8% of the studied players go on to play at the Group stage of the UEFA Champions League (keeping in mind they these players are often seen as the most talented in their country, hence the international attention).

- Only 10.5% play group stage of any European competition (including UEFA Europa League and UEFA Conference league).

It should also be noted that a range of countries around Europe currently have some protection mechanism, which is recognised by FIFA, to protect the registration of a young player before their 16th birthday. This is important not only because early migration of players is linked with challenging outcomes for the players themselves, but also because it destroys the business case for a club investing in an elite development system in the first place, if the most talented players consistently move for training compensation fees.

As a result, the above information provides two main implications:

1- Scottish football should explore the options utilised by other countries to protect the registration of players before the age of 16.
2- A nationwide communication strategy should be developed to educate parents and players on the importance of early exposure to senior football, and the trends observed in players who leave their home country before the age of 18.

## 3.2 Trends in Club Success

In parallel to this report, the European Clubs Association (ECA) has undertaken a similar project by analysing trends across Europe in clubs who are successful in transitioning players from their academy to 1st team. While their full report is due for publication later in 2024, we can summarize their key findings through our consultations with them on this topic.

### Importance of the Top-Down Club Strategy

A top-down club strategy, enforced from boardroom level, which permeates all areas of the club, was concluded as the most important factor in achieving success in the transition phase.

This model requires having an individual on the board with a strong expertise of the development process. This is in direct conflict with the "CEO / Manager" model currently employed by the majority of Scottish clubs, which places decisions around the footballing strategy of the club in the hands of the coach employed to lead the 1st team, rather than selecting a Head Coach based on their alignment with the club's long-term strategy.

While on first glance, it may be assumed that this would be met with resistance by 1st team managers, the vast majority of Scottish coaches interviewed for this project feel both that their job overall, the security of their position, and also the development of young Scottish players, would be improved by having a clear strategic direction from board level.

The ECA report found that the majority of clubs around Europe lack alignment in the strategic direction of the club (from interviews with CEOs, Sporting Directors and Academy Directors).

The recommendation is for the board to set a clear footballing strategy to run consistently throughout the club to bring through players in a structured way. This strategy should be realized on three levels:

**DNA > Playing Style > Tactical Principles**

This model correlates with the practical experience of one of the authors of this report, based on observing how the transition phase is managed in European clubs who are successful in this regard.

This will be discussed in more detail in Section 4.

**Quality of Staff Employed in Youth Development**

The second most important trend identified by the ECA report was the quality of staff employed in Youth Development.

During our consultations, we have identified challenges in Scottish football based on the feedback received throughout this process.

1- Key staff members not employed on full-time contracts.

2- Full-time staff being "stretched too thin" across a number of areas.

3- Salaries offered for full-time roles being unattractive to attract and retain high-level staff.

4- Board members being unwilling to invest in the academy beyond the minimum criteria outlined by the Scottish FA to achieve 'Elite' status.

5- The need for continued education in all areas of the multi-disciplinary process – not only for coaches, but also to improve the standard of physical development and mental skills training, for example. Specific ongoing education and shared best practice for Academy Directors and Transition Coaches has also been requested during our consultations.

It should also be noted that the ECA summary highlighted investment in infrastructure as being one of the least important trends

The Scottish FA is currently reviewing the state of facilities across the country, and whilst this is worthwhile investment given the context across Scotland, there remains the requirement to invest in the right people to develop elite level players. Indeed, the ECA report would urge clubs to "invest in people before facilities".

## Strategic Approach to Transition Phase

A further trend highlighted by the ECA was for clubs who are successful in the transition of players from academy to 1st team to have a specific strategy for this phase.

- The B Team model was highlighted as having a significant positive impact.

- For clubs without a B Team model, a different strategy needs to be developed, such as a Cooperation club system / Partnership club model / strategic planning around loans.

- In terms of players analysed, there was an equal 50% split between those players who came through a B Team system and those who developed through a loan or Cooperation club, showing that both models can work.

- Another trend is for the employment by successful clubs of specialist staff members for this phase – such as Loans or Pathways Manager or Transition Coach – and having access to an education hub for the continued development of these individuals.

## Exposure to International Games Programmes

The final trend highlighted by the ECA was around the exposure of players to a variety of styles and systems throughout their journey by scheduling regular competitions against international opponents.

Outside of the above trends identified by the ECA study, we list below two additional topics raised by FIFA studies on player development.

**‘Best v Best’ Environment**

One issue highlighted by the FIFA studies and verbalised by Arsene Wenger on the quote to the right, is particularly applicable to smaller countries such as Scotland.

The message is that in order to turn the underlying disadvantage of having a smaller country in to somewhat of a positive, the best talents in the country should be identified and brought together to train with each other regularly. This is harder to achieve in a bigger country, where the best players are spread across larger distances.

The ‘Best v Best’ concept is not new to Scottish FA strategy, as the original Performance Director Mark Wotte made this a key point of his strategy. This included organising Elite Regional Academies consisting of players from several clubs and setting up Scottish FA-led Regional Performance Schools.

> “What we found out, and what explains countries like Croatia, like Uruguay – who are small countries, three million people – is that a number of good players on a short surface is more important than a number of good players on a big surface.
>
> I realised 40 years ago from a study I made for Netherlands, why I want to put the best with the best. Because they play against each other, they stimulate each other. That explains countries like Netherlands, Croatia, Uruguay.”
>
> - Arsene Wenger on the importance of talent density from FIFA studies on player development

However, the question is whether the systems established to create this ‘Best v Best’ environment have led to the desired outcome, and whether they have gone far enough. One of the authors of this report has experience of both working in the ‘Best v Best’ environment in Croatian football and working in the Scottish FA’s Regional Performance School. Based on the observational experience of both – the level of players training together in one of Croatia’s top two academies was very high across the squad – while the Scottish FA Performance School’s had much larger diversity both in terms of ability and in also in terms of mindset across the group. By definition, this suggests that the programmes did not actually go far enough in achieving ‘Best v Best’.

The Scottish FA still funds 27 academies around the country, which cannot be seen as effective investment in achieving ‘Best v Best’. Furthermore, comments from our consultations with Academy Directors have included not all games in the ‘Elite’ tier of our academy programme being competitive enough, and some clubs only having a few players per age group they would define as having ‘high potential’.

This report therefore concludes that a thorough review of the current Player Development system (consisting of all phases before the player turns 16 years of age) should follow this report and conclude with recommendations to ensure players are better prepared for senior football by the 16-18 age bracket.

**Training vs Game Time in Development Phase**

Another interesting topic raised by FIFA was the balance between training versus game time during the development phase of the player.

During one of our consultations with a 1st Team Manager of a Scottish club, the logical argument that players "should play more games, as many games as possible" from 12-15 was made.

However, this seems to be in opposition to the recommendation made by Arsene Wenger, which proposes to reduce the number of games over the year to give more time for individual-focused training.

Undoubtedly, competition during the development phase has an important role, but it can also undoubtedly encourage bias in coaches and parents towards a view of the process which is built around performing on the weekend. The team behaviours required for immediate performance do not always equate with the habits needed for long-term success as an elite senior player and can lead to a lack of focus on the basic fundamentals, as explained by Arsene Wenger in the quote provided.

> "Because if you think that you play for 40 weeks, 44 games for a young boy, you're 14 years of age, the time dedicated to training is too short, since you go to school during the week and play games on Saturday and Sunday. We could do with 25 games and more training because what is very important is that the player doesn't come up prematurely. I was always promoting young players, yet I got many players at 18 years of age who had huge flaws in their game. No left foot, no ability to head the ball, because they had no time to improve these aspects of their game. After this age, it gets very late to work on these elements, because from 18 onwards, you go into top-level competition and have even less time."
>
> - Arsene Wenger on the need to protect training time in the development phase

The unique examples of Serena and Venus Williams, albeit in a different sport, who were not allowed to compete in youth tennis (beginning to compete for the first time at professional level), gives an interesting perspective on the pros and cons of competition at the development stage.

One of the authors of this report experienced a 'fundamentals-first' methodology in one of Europe's top academies. To highlight this point – it was rare that that a Dinamo Zagreb youth coach would have more than one session per week with the full team during their time in Secondary Education; instead, they would work with half of the group earlier in the day, and the other half later in the day, forcing them to focus more on the individual development of the player than the organization of the team. Individual coaches also had important roles in providing tailored support to selected players and ensured sufficient repetition of key areas of their game.

Furthermore, one of the authors of this report also worked closely with the author of the Croatian Football Federation Curriculum, which was implemented by Dinamo Zagreb academy in the period that it was recognised as one of the best in Europe. Such a curriculum is important specifically because it mandates how much time a player must spend on each area of the game across different age groups, ensuring holistic development. Age-group coaches are managed from section leaders to ensure they meet these methodological demands. An almost identical

system of development has also been encountered by one of the authors of this report at both Real Sociedad and Athletic Bilbao, another two of Europe's best academies.

The reason that such a detailed, top-down curriculum is important is because it ensures that players spend sufficient time working on all the fundamentals needed to achieve success as an adult player, without allowing coaches to adapt the focus of sessions toward the short-term performance in games against other academy teams.

## 3.3 Trends in Success of National Associations

In parallel to this report, FIFA have been undertaking a report on Transition Phase Trends and Strategies, also scheduled for publication later in 2024. Through our consultations with FIFA on this project, we have also received a summary of key findings through the perspective on the National Association. They are outlined below.

- Similar to clubs, Football Associations can also employ a top-down strategy via the Technical Director, to ensure that a long-term direction is taken through all phases of the game, including to 'A' Squad Level, which does not sit outside the remit of the Technical Director in Associations which employ a strategic approach, but currently does within the Scottish FA model.

- A well-functioning Coach Development system has to be at the centre of any plan of the National Association.

- The importance of having a strategic narrative cannot be underestimated – clear messages which are drip fed over time. "Simplified messages supported by forensic detail underneath."

- Developing "mechanisms that reward excellence and challenge mediocrity" in player development via the academy criteria system and other levers.

- Organising a system which accentuates opportunity for 'Best v Best' development.

- Improving communication links and support structures for players who move outside the country to play in the Top 5 leagues – for example, the Japanese Federation opened an office in Germany to better support the growing number of Japanese players who were moving to Bundesliga clubs.

- Creating a breathing system that allows players to enter the elite development system but provides a net to catch those with potential who are missed – several German World Cup winners came through DFB Regional Academies designed for players who were not training at elite academies at that time.

**FIFA Report – Specific 'Transition Phase' Recommendations for National Associations**

According to the recommendations from the FIFA report, "National Associations should develop strategies to ensure that players are guided through the transition from youth to senior level in a way that is both beneficial to their development and guarantees that they get enough playing opportunities".

While not all of these strategies would be applicable within the context of Scottish football, they will be included in this report for transparency.

Strategies listed in the FIFA report which can be utilised by Member Associations (MA) include:

- B Teams
- Rules and Regulations on young player minutes / foreign player limitations
- Club Cooperation Agreements
- Club Licensing Criteria
- Financial Incentives
- Youth National Teams Playing in Senior Leagues
- Employing or part-funding specialist staff in Transition Phase
- Harnessing development pathways for eligible players outside of the MA border (e.g. 9 Players in the Welsh 'A' National Squad at the 2022 World Cup were born in England)
- Use of Future Teams to combat the problems within the Growth Maturation phase

# Section 4.

# Consultations Summary

## Identified Challenges & Potential Solutions

One of the major undertakings of this strategic review was to engage in consultations over a 9-month period with a range of stakeholders who either have been, or are currently, working throughout our pyramid and at different levels of the game. This includes those involved in the sporting decisions at Board level, 1st Team Level, and Youth level. We asked the question "What are the challenges that prevent more young Scottish players collecting senior minutes?"

The feedback received from these stakeholders has enabled us to put together the range of different issues they are dealing with at the coalface. For the purpose of this report, we have identified the trends which have noticed across a number of different consultations and organised them in a number of different sub-sections.

We have included the list of these trends below in short form, followed by a short commentary on each area and suggested potential solution for each challenge which has been mentioned. While this section will outline the issues raised and the context for suggesting a potential solution, the entire "menu" of options for change is available as a list in the next section.

Issue 1: Gap Between U18s and 1st Team

- B Team Model Without Support
- Current Reserve System "Not Fit for Purpose"
- Issues with Loan System
- International Window
- Issues with Current U18 Programme

Issue 2: Lack of Strategic Approach

- Lack of Club-Wide Football Strategy
- Shortening Tenure of The Manager
- Lack of Strategy in Transition Phase

Issue 3: Lack of Individual Player Support in Transition Phase

- Management of Loans
- Management of Individual Development Plans
- Need for Multi-Disciplinary Support
  Managing the Adaptation Period to Regular 1st Team Player

Issue 4: Size of the Leagues

- “The biggest challenge to playing young players”

Issue 5: Mentality, Parental & Cultural Influences

- Talented Players with Mentality Issues
- Resilience
- Parental Issues
- Peer Influence
- Nutrition & Lifestyle

Issue 6: Issues with Youth Development – “Players are Behind”

- Issues with Grassroots Base
- Issues with Player Development – Technical, Tactical, Physical
- Lack of “Elite” Development

Issue 7: Issues with CAS Criteria & Funding System

- ‘Tick Box’ Criteria System
- Input-Based Funding vs Incentive Based Funding
- Lack of Qualitative Audit

Issue 8: Lack of Rules / Quotas

- “Development happens where it has to happen”
- GBE Rules

Issue 9: Internal Scottish FA Processes

- Communication with Clubs
- Game Model & National Playing Philosophy
- Talent ID & Selection Process
- Scottish FA Performance Schools
- Targeting ‘Special Projects’ for Development
- Research & Innovation Hub
- Financial Generation & Distribution

Issue 10: Early Migration of Young Players

- Lack of Contractual Protections
- Lack of Senior Football & Development
- Lack of Scottish FA Player Management System

Issue 11: Goalkeepers

- Consider a Scottish FA-led 'special project' on the development of elite goalkeepers, including content on model performance for goalkeepers in different phases of the game, supported by a toolbox of best practice for goalkeeping coaches.
- Consider how the profile of the goalkeeper links to a club-wide game model through Club Academy Scotland License criteria.
- Consider a Scottish FA-led '2nd chance' trial system for outfield players who have been released to re-train as goalkeepers.
- Implement a Club Cooperation system to allow young goalkeepers who are 2nd or 3rd choice at their club to gain experience in senior football.

Issue 12: Facilities

- Lack of Indoor Facilities in Winter
- Lack of Outdoor Facilities for Youth Team Training
- Lack of Multi-Disciplinary Facilities
- Quality of Pitches

Issue 13: Staff Development

- Knowledge Gaps
- Lack of Access to Ongoing Education Support

Issue 14: Lack of Narrative Control

- Lack of Clarity in Scottish FA Communication Strategy
- Lack of Recognition for Those Developing Players

Issue 15: Lack of Ongoing Management

- The Need for Continuous "Follow Up"

Issue 16: Pressure on Managers / Head Coaches

- Lack of LMA-style organisation to support Managers / Head Coaches

## Issue 1: Gap Between U18s and 1st Team

An issue that led to almost unanimous agreement among our consultations was that a gap existed in the pathway between U18s academy football and 1st team football. A number of 1st team managers questioned the level of U18 games and felt that even if a young player was standing out amongst his peers in those games, they would not feel able to trust the player in 1st team environment. For those clubs who operated a B Team in the Lowland League, they believed this experience was more beneficial than playing U18s Academy football, but still felt that a middle step was needed to prepare the players for 1st team level.

As we have discussed thoroughly in Section 3 – early exposure to senior football is a clear trend in the development of Elite players, and this can take place at different levels of the pyramid. Therefore, based on all available evidence, it would be ineffective to close this gap by extending academy football (for example, to a U21 League). Instead, it is important to focus on solutions which generate the crucial exposure to senior football between the ages of 16-18.

As was shown in Section 3, the B Team Model abroad (where the teams are able play at a higher level of league than in the Scottish set-up, which limits them to Tier 5) has been shown to be effective both in ECA and FIFA reports. However, based on the feedback we have received, the model of allowing these teams to advance through the pyramid is without support in our country, and we should look to generate other solutions.

It was also mentioned on a number of occasions that the 'old' Reserve system which operated in Scottish football helped to plug this gap, by allowing playing experience, both 'with and against' senior players. It could be argued that the Reserve league was, in fact, early exposure to senior football. However, the overwhelming feedback we have received was that the current Reserve system is not fit for purpose, and that a solution that better fits the modern context should be found. Among the issues listed with the current Reserve system were:

- Games not played in stadiums, "doesn't feel like real football".
- Extended benches at 1st team level in the modern game meaning fewer senior players are available for a Reserve fixture.
- Teams cancelling games at short notice.
- Teams being mismatched in level – one team fielding senior players and the other playing with essentially a U18 squad.
- Not all games providing the "with and against" senior players experience – essentially becoming an Academy game.
- Clubs not having the resource to carry enough players in the professional phase to operate a Reserve team.
- Clubs lower in the professional pyramid, who would like to loan young players and provide them with actual exposure to senior football, feel these competitions may encourage clubs to keep young players in-house to "fill a squad" for match days.

Another topic which frequently discussed was the current loans system. Unsurprisingly given the Trends observed in Section 3, a number of clubs who have utilised this system effectively

felt it was, based on their experiences, "much more beneficial" for the player to go on loan than remain at the club without exposure to senior minutes. As was discussed in Section 3, even players who have had a relatively unsuccessful loan (lack of consistent game time) appear to have benefited more from the experience of being exposed early to senior football than being kept at their parent club without a realistic chance to play in the 1st team.

However, a number of challenges were also highlighted within the current loans system, such as:

- Due to budget, the parent club carrying a tight 1st team squad, combined with lack of ability to recall a loan player, meaning that they need to keep young players at the club "just in case" injuries occur – these players usually achieve few minutes over the season.

- The parent club playing in European competition, which means they are required to fulfil Homegrown Criteria rules within their matchday squad, and therefore cannot send a number of players on loan. These players usually achieve few minutes during the season.

- The parent clubs feel there are some examples where a loan has been detrimental to a player, and the lack of ability to recall the player meant they "lost 6 months" of the player's development.

- The loanee clubs regularly felt that there was lack of communication or interest from the parent club, meaning the young player felt discarded and unwanted by the parent club, which affected their motivation.

- The loanee clubs cited a number of examples where a parent club did not allow a talented young player to go on loan, and over the following years, the player did not develop due to a lack of exposure to senior football at the key stage (16-18).

- The loanee clubs highlighted that parent clubs were often financially focused when sending a player on loan, rather than seeing it as an investment in their development. When discussed with 1st Team staff at parent clubs, the lack of boardroom strategy was highlighted – directors at the club lacked an understanding of player development or long-term strategic approach, and therefore did not understand the value in sending players on loan if wages were not fully recouped or penalty clauses not inserted. Loanee clubs have cited that "it can be cheaper to get a player on loan from a club in the English Premier League or Championship than a Scottish club".

- The loanee clubs highlighted that parent clubs would often try to place large penalties in place if a young player did not play during the loan. If the loanee club was to accept such a deal, their club would be unable to sustain the potential costs of the player, and therefore could not accept. The player would then remain at the parent club without exposure to senior football. As has been discussed in Section 3 – a young player being exposed to senior football, even when they did not play regularly, seems to provide more benefit than remaining at the parent club (unless they are featuring in the 1st team).

Based on a number of points raised around the loans system, Reserve football and B teams in this section, we feel that a potential solution which may fit within Scottish football is the introduction of a Cooperation Club system. One of the authors has experience in developing young players through such a system, which already currently operates in a number of countries such as: Austria, Belgium, Croatia, Hungary and Serbia.

The Cooperation system allows more flexibility than the current loans system and solves some of the issues mentioned above. During our consultations, we received widespread support for the implementation of such a system, which we would propose to trial for an initial season.

An example of how a Cooperation system might work is outlined below:

- A club in the SPFL Premiership or Scottish Championship is able to operate as the parent club, and sign cooperation agreements with clubs further down the pyramid.
- A club cannot sign a cooperation agreement with a club in the same league as their 1st Team or B Team.

- The parent club may sign a cooperation agreement with a different club at each level of the pyramid, so long as the parent club does not have two cooperation clubs within the same league.

- The parent club, who pays the full salary for players under this system, is able to list a maximum of 3-5 players who would appear on a 'cooperation list' between the two clubs. Only Scotland-eligible players under a certain age are able to be placed on a cooperation list – age category to be determined (e.g. U19 or U21).

- Players who are on this cooperation list are able to move freely between both clubs outside of the transfer window, so that if, for example, the parent club has injuries in the player's position, they may recall the player at any time. As the parent club pays the salary for the player and maintains the registration, they have the final say on the movement of the player. In practice, clubs around Europe who benefit from this system maintain positive relationships with the receiving club – so that, for example, they are using their ability to recall responsibly and with appropriate timing of communication. Naturally, clubs which operate in ways that do not foster such a relationship are unlikely to be chosen in future as a Cooperation club in either direction.

- Because there are usually several players from one parent club at the receiving club, this fosters more frequent communication and knowledge-sharing practices than a regular loan, which serves to benefit the young players.

- We would intend to extend the Cooperation system down to Highland / Lowland League level, at the request of several clubs, either due to their geographical location, or the level of some their young players being best suited to this tier.

- Clubs are able to change which players are on the cooperation list at several points throughout the year – to remove a player who has been recalled / not participating and replace him with another young player who may benefit from the experience.

- By allowing flexibility for clubs to change which players are on the cooperation list until the end of the summer transfer window, this would allow receiving clubs to effectively "trial" young players during the early stages of cup competitions.

- The Cooperation system does not replace the loans system, or count towards the loan quota, meaning clubs can use either of, or a combination of, both systems.

Another issue which has been highlighted around loans, which would be exasperated by the Cooperations system stimulating an increase in young players playing at the lower divisions, is that no International Window break currently exists for clubs outside of the SPFL Premiership. We are aware that the International Window is followed in some countries below the top division, so as not to cause disruption to those clubs who provide senior playing opportunities to the nation's best young talent. We intend to raise this issue to SPFL for their consideration if the Cooperation system is implemented.

With regards to the U18 Academy Competition itself, several issues have been highlighted.

- The 16-18 age group is a key stage for exposure to senior football, but the competition does not allow participation of senior players.

- Games are currently scheduled on a Friday, which means the 1st Team Head Coach may take players for the bench the following day, and if the player does not feature, the player is left with no games programme. The scheduling also limits the ability of 1st Team staff to pay close attention to the games, as they are mentally preoccupied with the upcoming 1st team game.

- Fixtures being cancelled at this level has also been highlighted.

Several clubs would like the option to 'opt out' of the U18 League if a Cooperation system was put in place. This is due to budgetary restrictions meaning that they are limited to carrying a certain number of young players in this phase. If they are prioritising participation in senior football of those players, they would therefore not have a squad capable of competing in the U18 League simultaneously. Given the trends observed in Section 3, the Scottish FA should look to support any team who prioritises the early exposure to senior football of young players and be cautious not to inadvertently create a system which encourages clubs to retain young players just to compete in age-group competitions through CAS criteria.

In response to the issues outlined above, we can propose several topics for consideration:

- U18 academy games to be moved, for example, to a Monday, rather than a Friday.

- The U18 League to be 'opt in / opt out' for all clubs, rather than mandated as part of CAS criteria. If clubs choose to 'opt in', they should therefore be expected to fulfil fixtures in order to avoid disturbance for other clubs within the league.

- Given the positive feedback received during the consultation phase about the old Reserve system, we would propose allowing a certain number of overage players to feature. This would create a number of potential benefits, namely:
    - Playing with and against senior players as a key driver in elite development.
    - Raising the standard of U18 games, which is currently deemed to be too far from the 1st team environment.
    - Allowing 1st team players who are short on minutes access to a games programme.
    - Allowing 1st team players rehabilitating from injuries access to a games programme.
    - Creating a pathway for experienced players on the verge of transitioning into a coaching career – for example, an individual may simultaneously act as an Assistant U18 Coach who also participates in the games – a model which is operated in a number of other countries.
    - Creating a developmental experience for young Scottish coaches, by allowing them exposure to working with and against senior players.

It must also be noted that the trends identified in Section 3 raise the point that elite development follows a trend of being involved in senior football in the 16-18 age range. Therefore, the benefit of players participating in U18 age group competition as it currently operates, is, at best, unproven.

As a final suggestion made by one club, they have requested a shared platform across Scottish clubs which provides the "Development List" for each parent club, allowing other teams to easily identify which players may be available for loan.

**Issue 1: Summary of Potential Solutions**

- Provide education opportunities for clubs at board level on the importance of player pathway planning as an investment in the long-term development of the player.
- Implement an initial 1-season trial of the Cooperation System.
- Raise the topic of the International Window to the SPFL, to consider how clubs and / or our National Teams would be affected by more National Youth team players featuring below the SPFL Premiership.
- Consider several changes to the current U18 Academy structure.
    - Scheduling games after, rather than before, 1st Team matches.
    - Allowing an 'opt out' system.
    - Allowing a number of overage players to participate.
- Creation of a 'Development List' platform, which allows clubs to place, and easily identify, young players who are available for loan.

## Issue 2: Lack of Strategic Approach

As was discussed in Section 3, an ongoing ECA report into the transition phase highlights that a well-implemented, Board-Led Football Strategy is the most important factor observed in clubs who achieve the highest level of success in transitioning young players from the academy into the 1st team.

It was therefore notable that through almost all of our consultations, topics were raised which linked back to the lack of strategic approach being taken at clubs. A summary of such examples raised by stakeholders during the consultation phase can be outlined below:

- Lack of alignment between, and the style of play being "totally different" in, the Academy and 1st Team, meaning that a decade and considerable financial resources have been spent developing a player in a style of play that does not fit the profile the 1st team Head Coach is looking for.

- Clubs working month to month or season to season at board level, with no long-term plan or strategy.

- Due to either a lack of understanding of the process, or taking a deliberate short-term view, Board members viewing investment in the academy as an "expense", rather than investment with potential for significant returns, leading to youth development programmes which do not truly reach the required standards for elite development.

- Clubs' most talented academy players looking to move outside Scotland, despite the stark data shown in the ECA report on Early Migration, because according to the player, their club has offered them no development plan or pathway to the 1st Team.

- Clubs wanting to develop young players at Board-Level, but neglecting proper process in the recruitment of a Head Coach who fits this model, including, in several cases, having no structured Head Coach recruitment process whatsoever.

- Clubs operating a 'Manager' model with the Head Coach of the 1st team given responsibility for club strategy, resulting in a number of issues:

    - The manager is given full responsibility, and therefore blame, for club processes, resulting in a continuous cycle of firing the manager, rather than focusing on improving the long-term strategic processes of the club to achieve sustained success.

    - Even when the board would like the development of young players, examples have been given of the Manager refusing to work with academy players, with no football leadership above their position to discuss the club's strategic vision and ensure it is implemented.

- The Manager being responsible for choosing which young players to offer professional contracts to, despite have not spent enough time to watch them properly, understand their trajectory or potential, and having an inherent bias towards players who can help in the immediate future rather than focusing on the long-term development of the club.

- One Manager releasing a talented young player and being fired a few months later, only for the next Manager to say that he would use the same player in the 1st Team, showing a lack of consistency in ideas and approach within the club.

- Players who turned out to be the "biggest talents" in the recent history of the club, and who went on to successful careers, missing the key 16-18 window for senior football (playing U20 football) because a previous 1st Team Manager deemed them "not good enough", and the club having no one to protect the long-term development of these players at Board level.

- The 1st Team Manager being in charge of whether a young player should go on loan or not, resulting in the club's top talents not going on loan, but also not playing with the 1st team.

- Clubs having no individual at Board level with the technical expertise required to understand the correct processes and identify, and hire, the correct staff to carry out the strategy across the multi-disciplinary structure at all levels of the club.

- Clubs having no individual at Board level who is able to build the 1st Team squad with the development trajectory of 'project players' from the academy in mind.

- Clubs having no KPIs at Board level for either the 1st Team Head Coach or Academy Management around Youth Development, or someone on the board with the knowledge to monitor and manage these processes.

- Clubs either having no designated individual responsible for loans, or even clubs with a full-time Loans Manager, not having a strategic approach to the development of the player, or not communicating with the player once on loan, leaving the player feeling abandoned and demotivated. Clubs also not having any footage of the player who is on loan, with no idea how the player is performing, was mentioned.

- Clubs who do achieve success in the development of a young player, lacking the experience on the board to capitalise-– such as by offering a new contract at the correct time (allowing the player to leave for free), understanding the global marketplace, or lacking a network throughout the game and appropriate strategies to bring various offers for the player, and thus losing the player for a fee which may be below the market value. Clubs may also sell the player too early, missing out on value, because of lack of understanding of how the transfer market operates.

- Clubs at board level seeing loans through a financial lens rather than an investment in the development of the player – including keeping the player at the club if significant demands are not met (relative to the level of the loanee club), resulting in no exposure to senior football.

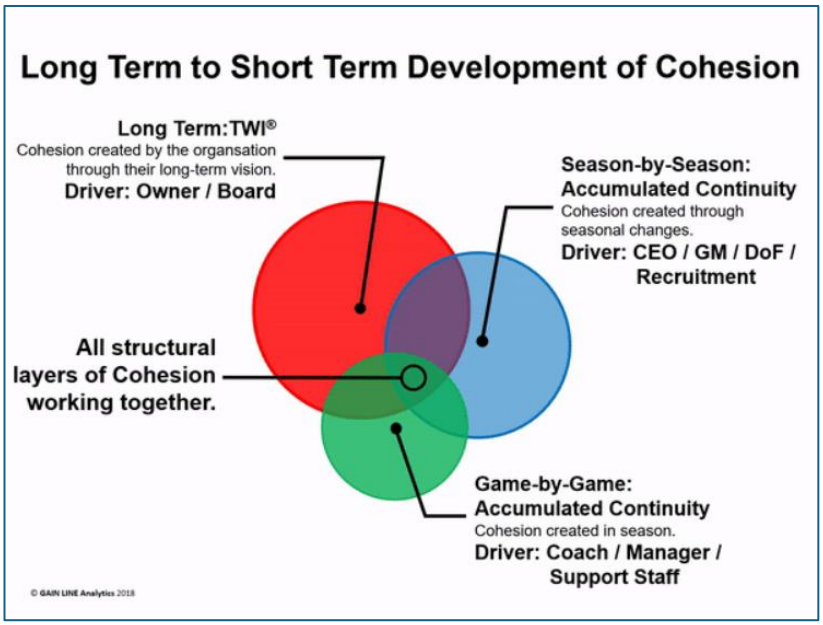
- Clubs not having Individual Development Plans for young players in the transition phase, focusing either on their technical / tactical development, or on their development in all areas of the multi-disciplinary process (such as a physical development or mental skills training). A lack of clubs with an Individual Coach or Transition Coach tasked with ensuring this process is carried out.

- 1st Teams training at different times and different venues than the oldest academy teams, meaning that there is no opportunity to move young players across if a player is injured or pulls out of training at short notice. In a number of cases, the trajectory of an elite player began based on the "chance" encounter with a 1st team coach due to being called up to train at the last minute and allowing them to showcase themselves.

- Clubs selling academy players for transfer fees, providing evidence for the revenue generation potential of such a model, but then focusing less on the academy and reinvesting in a short-term approach (1st Team player budget for one or two seasons).

While it is outside the scope of this report to be able to comment on the potential solutions for each of the issues raised during the Consultation phase, we will attempt to provide an introduction to several key areas of consideration below, and would propose that offering decision makers at clubs around the country the opportunity to learn from leading experts in the field of Football Strategy, along with continuous and ongoing support, must be a central outcome of this report.

Secondly, it must be noted that this is not only a Scottish problem. In fact, research by Optima Football Academy in 2019 found that 75% of clubs across the top 5 leagues do not have a long-term approach to issues like continuity of style of play, recruitment, and employment periods for head coaches. Therefore, this is an issue around the football industry as a whole – but is also exactly the reason that clubs who follow such an approach can reach a competitive advantage and overachieve their budget.

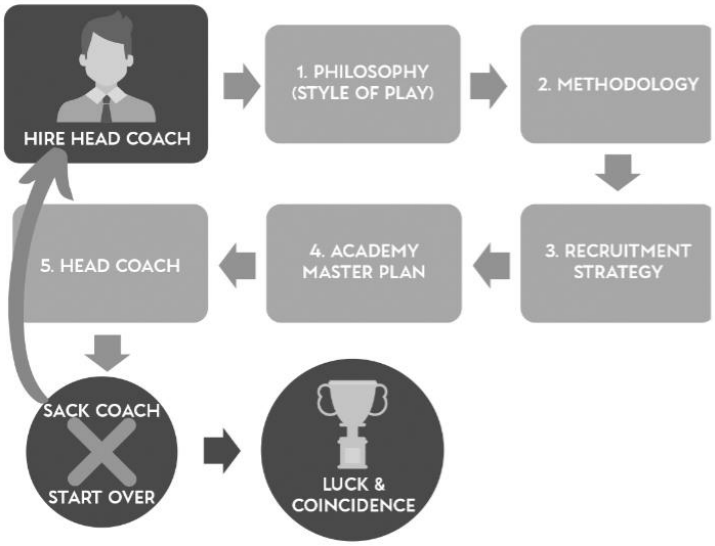



A host of evidence (which can be elaborated on in more detail in future) shows that clubs who follow such a strategic approach have a competitive advantage over those who do not.

For example, research by GAINLINE Analytics (2018) suggests that following a cohesive, club-wide strategy can improve performances by as much as 30-40%.

On the flip side, research exists to show that clubs who have a bigger turnover of players during a summer transfer window are much more likely to suffer poor results in the following months, than teams who value underlying continuity supported by specific, targeted ongoing recruitment. Clubs who operate without a true Sporting Director model have no chance to implement such continuity or cohesion, which is why overachieving clubs prefer this model.

On the image on the right, globally-respected expert on Football Strategy, Mads Davidsen (currently Head of Football at Right to Dream Group, who frequently have the youngest average age in a European top division through FC Nordsjaelland, while consistently overachieving their budget in terms of results), outlines what he terms 'The Unhealthy Model' in his 2021 book '*How Hard Can It Be?*' – where the board hands the power on football strategy to the Head Coach of the 1st Team.



Due to our traditional links with 'The Manager' model, Scotland has been one of the last nations to adopt a 'true' Sporting Director model (please note – we define a 'true' Sporting Director model as one where the entire footballing philosophy of the club, along with its alignment, management, and implementation, rests under a member of the board with significant technical experience and a long-term strategic outlook. This differs completely from a model, more commonly employed in Scotland, where a 'Sporting Director' or equivalent is hired to help the Manager with recruitment of players).

This model was logical in a previous era of the game where the Manager did, in fact, perform the equivalent role of the Sporting Director. It was not uncommon for a manager to remain at the club for a decade or more and take responsibility for the organisation of the full club over the long-term, including organization of the academy. In this model, the Manager was not always a coach who led training sessions on the pitch, and often delegated this to an assistant. This is diametrically opposed to the European style "Head Coach", who should be a specialist in training methodology, tactics, and analysis.

However, the average tenure of the Manager has reduced dramatically in recent decades. In the 1990s, this model would still have made some sense, as the average tenure of the Head Coach around Europe was still as high as 3 seasons. However, a recent report by TransferRoom (2024) shows that the average tenure of a Head Coach across Europe's top 20 leagues *stands at less than 8 months*. Therefore, the glaring lack of logic in placing strategic decisions in the hands of an individual who is unlikely to see out the season is obvious, since strategy, by definition, assumes a long-term plan.

It should be noted that the short-term tenure of the Head Coach in Scottish football was frequently mentioned during our consultations as the main factor why more young Scottish players are not developed from the academies. However, as we can see, the average tenure of the Head Coach is equally short across Europe. The difference is that those clubs who are most successful in developing young players follow a strategic approach and see the Head Coach as an individual who should be selected to fit their board-led strategic vision, rather than the person who sets the strategic vision. Unsurprisingly, clubs who follow a strategic approach are also less likely to change the Head Coach, because they understand that a successful strategy is made up of a diverse but equally important number of parts, rather than resting entirely on one individual. For example, if the Head of Performance is responsible for planning the training week, and there is a constant problem with muscular injuries, why would the Board blame the Head Coach for poor results?

"Clubs regularly choose the coach-firing solution to solve their problems, particularly if the strategy is either non-existent or, as we have seen, coach dependent, and this makes it even more difficult for clubs to improve all the time. Especially when, according to all available empirical evidence, the replacing of a head coach has, at best, a very brief or no appreciative effect at all."

- Football Strategy expert Mads Davidsen, currently Head of Football at Right to Dream Group, and consultant / guest speaker for a host of other elite-level organisations

Through his extensive research on club strategy, three of the main reasons Davidsen (2021) outlines as to why clubs following the 'Unhealthy Model', are:

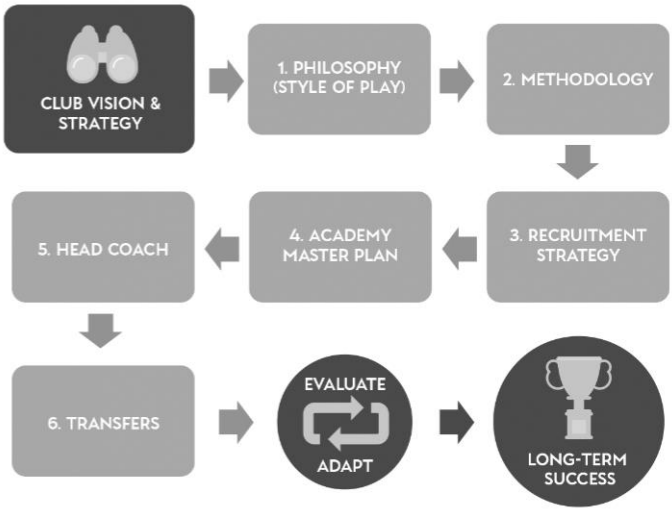
- Lack of football knowledge in the ownership / boardroom.
- Lack of connection between the boardroom and the training ground.
- The Sporting Directors and Technical Directors often do not have elite level coaching experience or the requisite knowledge to build up a club philosophy, methodology and alignment throughout the club.

As we can see, the success of a football strategy depends not on the Head Coach or "Manager", but on the Board (1) employing a Sporting Director or Technical Director who is responsible for the long-term strategy, and (2) ensuring they hire the correct profile to implement a football philosophy at all levels of the club, if promoting players from the academy is a strategic objective of the board.

"We don't look so much at the league table position when we evaluate performance. What we look at are the underlying metrics, which we believe are a better indication of where we are going and how we've done. We know how we measure performance; we don't overreact to those swings in results that you see that are largely down to randomness - which you see more of in football because it's a low-scoring sport."

- Rasmus Ankersen, one of the pioneers of the strategic approach in modern football, who showed through his projects at Brentford and FC Midtjylland that a club could significantly and consistently overachieve its budget through working smarter than the competition.

With the above in mind, the diagram on the right shows what Davidsen terms "The Sustainable Model". Davidsen breaks down the club strategy in to 4 Key Areas:




**The Sustainable Model.**

1. The Football Strategy as the overall technical master plan for the club, involving the football philosophy, style of play, methodology, academy plan, recruitment strategy; and more detailed elements such as how to develop players and staff, how to provide feedback, meeting structures, analysis process, the collection and use of data, KPIs for measuring the implementation of the strategy, etc.
2. The Football Philosophy as the agreed internal understanding of how the club interprets the game.
3. Principles of Play which guide the development of a playing style. The style of play should not change from game to game or, importantly, from coach to coach.
4. Methodology is the way in which all of the above should be implemented across all departments of the multi-disciplinary structure. Every element of the methodology for all departments should be based on achieving the agreed football philosophy.

> "Clubs continue to surrender much of the power on football strategy to the head coach, despite the fact that, more often than not, they are likely to be shown the door after a short period."
>
> - Mads Davidsen

> "In some club structures, then you have to be the coach, then you have to be the technical director, then you have to be the communication director, then you have to be the image that defends the club and the players. But at the same time, that is something that the coach doesn't like.
>
> I was the coach at Inter. I was the coach at Real Madrid. I was the coach in my first spell at Chelsea. I was the coach at Porto. In some other clubs, I was not the coach, so that is very difficult."
>
> - Jose Mourinho on the issues facing clubs which implement the "Manager" model, reducing the opportunity for the Head Coach to achieve success on the field.

It is important to note that while the above discusses the importance of a club-wide football strategy, this does not focus explicitly on just the academy or transition stage. As the ongoing ECA report will show, success of the academy and the players in the transition stage arrives as an intentional by-product of clubs following an aligned, and well-delivered strategy, throughout the full club.

However, there are a number of things a club can do to focus specifically on the transition phase or academy, such as setting specific KPIs and parameters.

For example, Real Sociedad has a target of 60% of the 1st team squad to be from the academy, while AZ Alkmaar has a target of 50%. In the strategic model, the Sporting Director is responsible for ensuring that these targets are met, and as he / she is responsible for building the squad, it is therefore within their own hands to achieve these parameters. Of course, a club should not expect to jump unrealistically from its current situation overnight. Therefore, setting out a realistic and phased approach, breaking down the overall strategy into KPIs year by year, is another important role of the Sporting Director in the strategic model.

In a different example – in Croatia, where one of the authors of this report has worked - the priority was around generating a financial return from academy players, rather than building a team of them to compete in European competition. Dinamo Zagreb serves as a clear example of a club which delivered huge return on investment in the academy by moving players on strategically, rather than keeping them together as a team. Different priorities will result in different tactical approaches from the Sporting Director in order to achieve the overarching aims.

The Sporting Director should not only be responsible for overseeing the 1st Team and choosing the Head Coach that fits within the club's strategy. It is also their responsibility to ensure the management and implementation of the academy strategy – including recruitment of key staff (such as an Academy Director), and giving clarity to staff on the football philosophy and methodology of working across all departments which should be carried out. The Sporting Director must also then devise an effective management system which allows them to identify what is working well, what is not, and intervene accordingly. That is why it is essential the Sporting Director (or Technical Director, which may work alongside the Sporting Director in some models, with different skillsets and different roles) has a deep understanding of elite development in the model we are describing, rather than being focused solely on the recruitment of experienced players for the 1st team, which would implicate hiring an individual with a totally different skillset.

As an example, Ajax, which has long had one of the most productive academies in European football, has recently changed the way the club is structured at board level. The "Director of Football" is responsible for all the strategic and operational aspects of the football strategy outlined in this section but is not involved at all in transfers. For this, they have a newly created role for "Director of Transfers". This is an example of a club clearly employing an individual in a key position with the skillset of creating and managing a long-term strategic approach to the football departments.

Regarding the transition phase specifically, we can summarise several key areas in which the Sporting Director / Technical Director can play an important role in the strategic success of the club:

- By setting out a thorough recruitment process for the Head Coach, to ensure the recruitment of an individual who fits the club's long-term strategic vision, and outlining the specific expectations to the coach before he or she joins the club, to ensure they are both aligned.
    a. For example, a club may determine that the Head Coach must have a background working in an academy, or previously have achieved positive results while promoting academy players, as part of the criteria for selection.
    b. The Sporting Director can insert clauses into the contract about any key objectives which are agreed upon during the interview process. For example, the contract could mandate that the Head Coach must always field one U19 domestic player from the academy, if this is part of their strategy at board level.

- Determining "project players" and giving the Head Coach a target number of minutes for these players to play over the season, likely increasing season over season, as a KPI.

- By building the squad in such a way that ensures young players will receive opportunities to play. For example, Monchi, widely regarded as one of the best Sporting Directors in the world, who is reported to have made Sevilla hundreds of millions of Euros in profits while simultaneously winning an incredible 7 Europe Leagues – describes following a "70/30" policy on squad building. This means that 70% of the players are signed for immediate performance, while 30% of the squad are players with potential to be sold in the future. This helps ensure balance across the dual objectives of the club, and results in the starting 11 following the same 70/30 policy.

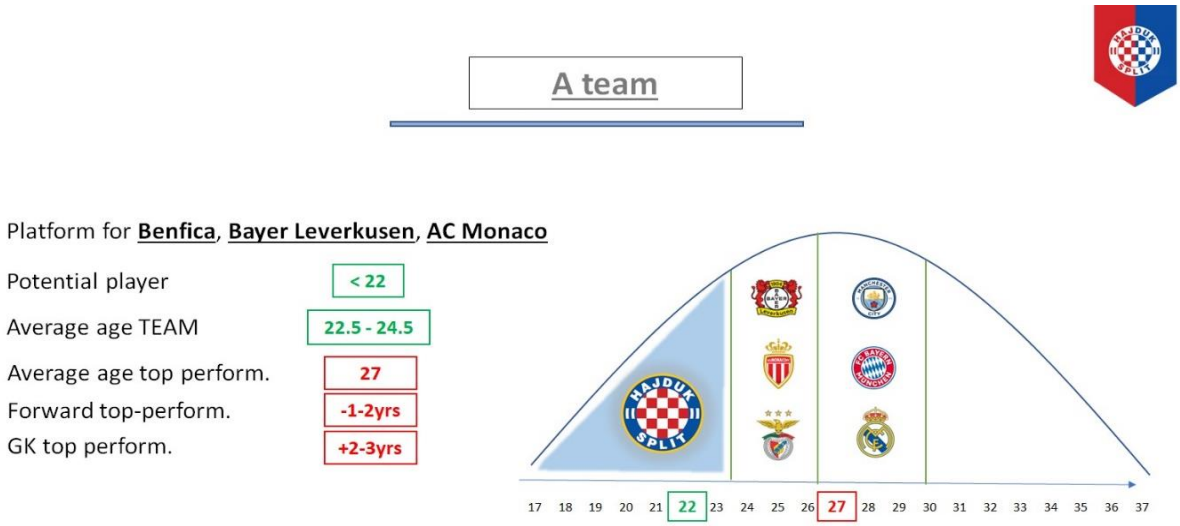
- More simply, if a Sporting Director builds a 25-player squad, from which 15 are experienced players and 10 are young players from the Academy, it is inevitable that some young players will receive the opportunity to play over the season, without having to mandate this to the coach explicitly.

"It often happens that clubs hire a new Head Coach – someone with so much decision-making power – based only on who knows the coach without much due diligence. No CEO in football or the business world is hired this way, so why don't football clubs do more to understand the person?"

Khaled El-Ahmed - CEO, Barnsley FC

Finally, it is important to note that the club must understand their context within the global footballing structure when designing their strategy. As one of the authors worked at Croatian club Hajduk Split, which has a well-respected European Academy, we can take this club as an example. As the strategy involved both developing world-class players through the academy, and also selling players to generate revenue to reinvest in the 1st Team, it was necessary for the club to understand factors such as:

- What does the world-class level look like? What level of clubs do the top teams buy from, at what stage of their career?
- Where do the clubs that sell to the top teams buy from, at what stage of their career?
- How do we need to work to prepare players for this reality?




In order to focus its strategy accordingly (not only in terms of player development, but also in terms of the strategic work of the Sporting Director in building potential avenues for transfers, to maximize the return on development), Hadjuk Split must accept that, based on its current level in the football hierarchy, it should be a platform to develop players for those clubs, who further develop players at a higher level, to then sell to the world's top clubs.

We can look at this situation through the lens of one of Hajduk's most famous academy graduates – Ivan Perisic. Perisic has had a playing career which has been more decorated than any Scottish player in recent decades: Playing in 3 of the Top 5 leagues (winning the championship in 2 of them), winning the UEFA Champions League, and playing in a FIFA World Cup Final. However, Perisic did not transfer directly to a top club.

Perisic originally joined Sochaux in France and gained exposure to senior football through the club's B Team. Later, Perisic moved to the top division in Belgium, where he won player of the year, and earned a move back to a Top 5 League with Borussia Dortmund.

Interestingly, the example path of Perisic also seems to benefit the player, because choosing the appropriate step to accumulate senior playing minutes appears much better correlated to later career success than moving to a top club in a different country at a young age, as has already been discussed.

**Issue 2: Summary of Potential Solutions**

- Establish a programme of ongoing support for clubs at board level who wish to implement a club-wide football strategy.
- Organise seminars with guest speakers who are experts in Football Strategy to present to decision makers at Boardroom level.
- Consider how the strategic approach of a club is represented in the Club Academy Scotland Elite Licence criteria.

## Issue 3: Lack of Individual Support During Transition Phase

During our consultations, we frequently heard of wide-ranging issues linked to the continued development of the player during the transition phase, such as:

- No formal or organised Individual Development Plan.

- Players receiving no communication or feedback from parent club when on loan, or parent clubs having no footage of how the player is performing.

- Players not going on loan but receiving little individual attention due to the fact that the Head Coach is focused on the core group of players who are more likely to play at the weekend.

- Players undergoing a difficult psychological transition – from being one of the "best players" in the academy to not featuring at all in the 1st team and feeling lost within the system.

- Players not receiving either encouragement, or an opportunity, to continue to work on foundational technical skills.

- Players not receiving individual video feedback to improve game understanding.

- Players not receiving bespoke individual physical development plans and strength and conditioning programs based on a functional movement screen, to detect and correct movement errors for injury prevention and improved performance.

- Lack of supplementary expert staff to support the player in areas such as Performance Psychology or Nutrition.

- Clubs who, at Board level, want to promote young players, not aligning operational decisions and recruitment of key staff members with this aim.

- Clubs mentioning that external stakeholders do not always give positive advice to players during this period (e.g. players, agents), highlighting the need for effective communication with all parties surrounding the player.

- Players going directly from the academy or starting every game consistently, increasing the risk of injury or psychological burnout.

As has been previously discussed in Section 3 on Trends, by analysing the patterns of players who have gone on to play at the highest levels of the game, we can see that the transition out of the academy was not the end of their development journey – in fact, through another lens, we could see it as the *beginning* of their development journey. We may consider this period akin to someone leaving school at 16 and being expected to be fully qualified in their industry, rather than receiving further education, an apprenticeship, or further training to prepare them for the demands of their new working environment.

Section 3 also highlights that clubs who have employed specialist staff in this area have benefited through improving a range of the issues described above. It should also be noted that several National Associations (e.g. Denmark, Austria) have taken a 'hands-on' role in supporting the quality of work of these individuals and monitoring closely the individual development of the nation's top talents, which also indicates that the Scottish FA should play a role creating an ecosystem of best practice in this phase.

During our consultations with individuals who have either employed, or themselves worked in different countries as a 'Transition Coach' or 'Individual Development Coach' at 1st Team Level, we can identify key points which were mentioned throughout these conversations:

- The profile of person employed in this role should not only focus on the technical / tactical development of the player but should be well-rounded to understand the need for appropriate physical development and psychological support.

- The profile of person employed in this role should player-development focused, not team-development focused.
    - "Connections become far more important than leadership".
    - "Cannot be judgement focused" – the Transition coach is there to support the young player to develop, not to judge their readiness for the 1st Team (this is the role of the Head Coach and Sporting Director).
    - "Must be detail focused".
    - "Too many people want to take these roles to get on the bench or become a head coach".

- All associations, clubs and individuals with experience of implementing this system in a well-organised manner feel there was added benefit to the young players.

- It was highlighted on several occasions that just by having an individual who frequently communicates with the young player on an ongoing basis during the transition phase, this provided a strong psychological support base when the player went through difficult moments or was not featuring in the 1st team.
    - The Transition Coach has an important role to play in educating the young player that playing with the B Team / Cooperation Club / going on loan is not a 'punishment', but a development opportunity.
    - "I teach them how to be a good substitute. Normally that is the one thing they haven't learned in the academy".

- For the role to be successful, it requires support from the level of Sporting Director, and the 1st Team Head Coach has to accept the role of the Transition Coach as leading on the long-term view of the player's development.

    - The Transition Coach should be a 1st Team Coach who links with the academy, rather than an Academy Coach who links with the 1st team.
    - It should be mandatory that they are involved in the 1st team sessions, which does mean that they should *lead* on any of the team exercises.
    - The Head Coach should have an important input in to the development plan of the young player. However, the priority is the long-term development of the player rather than short-term needs, which means the Head Coach should not have total control over this process. The Sporting Director should manage this situation accordingly.

- The group of players under the management of the Transition Coach should not be too large, otherwise the individualised approach will be lost. Focus groups of 7 to 8 players were common.

- Due to the constant cycle of pre-match day and post-match day lower intensity training, young players who follow the regular team routine but do not start 1st team games lose significant amounts of training and development time. For this reason, the Transition Coach should work with the Head of Performance on a bespoke periodisation plan for each individual in this group, to ensure they are receiving the correct volume and intensity of training.
    - "When players are out of the team, they are not happy, but this provides the opportunity to push them even more in training."
    - "There is an argument at the right time to take players out of game time to push them in certain areas for a certain period of time – long term player development".

- The Transition Coach can also work with players who are out on loan, through video feedback, supplementary individual training sessions, communicating with the staff at the loanee club and providing regular feedback to the parent club.
    - On loan players, one experienced Transition Coach stated that they "needed 5 or 6 development opportunities per week" – depending on games and team training, they would make up the extra sessions with individual / small group work / analysis.

- Management of the programme is important – again, the role of the Sporting Director / Technical Director is paramount to ensure it is being carried out correctly.
    - How does the Transition Coach maintain a database of information?
    - Are they working like another assistant coach or an individual-focused coach?
    - How are Individual Development Plans created, stored, and acted upon?
    - How is the training volume and intensity logged, along with data on how much time is spent working on specific areas?
    - What are the KPIs assigned to the person employed in this role?

- What is the weekly planning and meeting schedule for this project – who are all the individuals who need to be involved in these meetings?

**Issue 3: Summary of Potential Solutions**

- The Scottish FA to establish a more structured and regular communication with clubs, parents and agents to support the development of the nation's best young talents in the transition phase.
- Given the number of young players moving to England at a young age, the Scottish FA should consider how to expand this communication strategy across borders.
- The Scottish FA to establish an Education Hub with in-person meet-ups and guest speakers to share best practice with those individuals working as Transition Coaches or similar roles within clubs.
- Consideration of how to link Individual Development Plans and the quality of work carried out in the transition phase to Club Academy Scotland Licencing Criteria.

## Issue 4: Size of the Leagues

During our consultations, a frequent and strongly delivered message was the desire for League Reconstruction from stakeholders at all levels of the professional pyramid. To quote one such stakeholder, “this is the biggest challenge facing the development of young players”.

The argument is that by having smaller league sizes, almost every team is involved either in the fight for promotion or against relegation until, and including, the final game of the season, which leads to them favouring “tried and tested” players.

For transparency - as we have previously shown in Section 2, other countries with the same or more competitive league sizes featured significantly more young player minutes, indicating that this is not the main obstacle facing the transition phase. During our consultations with 21st Group, they indicated that based on their analysis of the data, the size of the league was not an important factor in the opportunities given to young players around Europe. Finally, the ongoing ECA report has not identified this as an important factor in young player development.

Therefore, this report must conclude that the size of the leagues is not one of the *main* factors influencing opportunities for young players – factors such as adding a Cooperation system throughout our pyramid, or clubs following a board-led strategic approach are much more likely to result in an increase in young player minutes, based on all available evidence.

However, the consistent message we have received from those working at the coal face of Scottish football is that larger league sizes would afford more opportunity for younger players, and also deliver a better product for fans, who – according to our consultations with clubs – are “bored and tired” with playing every team 4 times per season.

While league reconstruction is not within the direct remit of the authors of this report, this feedback will be forwarded to stakeholders responsible for the organisation of the game.

**Issue 4: Summary of Potential Solutions**

- Feedback regarding the strong desire throughout the pyramid for larger league sizes to be forwarded to board members across the Scottish FA, SPFL and PGB for consideration.

## Issue 5: Mentality, Parents, and Cultural Influences

Across our consultations, there was a clear trend highlighting issues which will be summarised below:

- Talented players lacking the mentality, discipline or work-ethic required to achieve success as a professional player.
    - "They want to be a professional, without being professional".

- Talented players with a strong work ethic putting pressure on themselves and lacking in coping mechanisms or psychological support during periods of failure or low confidence.

- Players lacking the discipline to focus on the less exciting parts of their development, such as technical repetition, strength and conditioning, or appropriate recovery habits.

- Players lacking in resilience or coping strategies when faced with adversity.

- A number of clubs emphasised that they felt the influence of parents who were uneducated on the player development process had a direct negative impact on the player's career.

- Several clubs highlighted cultural issues, particularly across the central and west of Scotland, led to a negative impact caused by the peer group surrounding the player.

- Clubs felt that, in comparison with other European nations, Scottish society develops a sub-standard lifestyle and nutritional habits from a young age.

Given that one of the most frequently mentioned trends in the success of young Scottish players was centred around mentality, and that it was one of the most frequently mentioned issues of players not fulfilling their potential, it is notable that our game does not have a strong infrastructure of support at 1st team, academy or national team level around performance psychology and mental skills training. As a number of Europe's top academies have emphasised the importance of developing the coping strategies, personality, and mental skills of young players, it would appear to be an area for improvement within our game.

As was also discussed in Section 3, the development of resilience, according to research in the area, comes via a highly challenging environment, combined with sufficient support to overcome these challenges. Therefore, it is important to understand the specific situation of each individual player during the development phase, to understand:

- Whether the player comes from a highly challenging environment, and the club should focus on offering support.

- Or whether the player comes from a highly supportive environment and needs to be provided with sufficient obstacles throughout their development journey.

It is worth noting that within the Croatian Federation's previous development system, the post-puberty period was targeted for "developing the tolerance to stress", due to the physiological and hormonal changes within the body allowing the individual to better cope with, and 'supercompensate' by growing stronger through, external stressors. This applies both to physical overload (e.g. strength training, aerobic training) and psychological overload. The way that clubs gradually increase the level of stress a player is able to tolerate should be considered not only through a physical lens, but also through the development of resilience.

Examples were also highlighted of young players who developed negative behaviour habits which were not corrected during their time in the academy. The reason given for this was that the academy was scared to lose the player to a rival club if they were too hard on them. In all such examples, the player failed to fulfil their potential as a senior professional, indicating the academy is more likely to lose the player by allowing these habits to form than by at least making an attempt to tackle them.

It was also mentioned that when players would go on loan to lower divisions for the first time, this came with a significant culture shock – the player would have to clean their own boots, prepare their own food and make their own way to games for the first time. It was suggested that academies could do more to prepare players for this reality.

A final topic which was raised several times relating to the resilience of players, is whether academy football has jumped from being, arguably, "over competitive" in the past with an emphasis on results taking precedence over player development, to being "overly sanitised".

> "Every single individual here has to be a representation of the club and the people, soon as a kid takes it easy, he needs to be reminded that there are others desperate to be in his place. This is the nature of the game and we must provide them with a sporting education as well."
>
> - U18 Head Coach Iban Fuentes explaining the decision to send two U14 players out of training for not meeting the required intensity at Athletic club de Bilbao, one of Europe's best academies

Regarding the influence of parents, this message was made so strongly and frequently that it became clear to the authors of this report that it must be tackled in a systematic way. It is therefore recommended that the Scottish FA takes a stronger role in achieving 360-degree communication with parents, agents, and clubs, in order to steer the environment surrounding the player as much as possible. Scottish FA-led workshops can be established, and ongoing best practice shared throughout member clubs. It is noted that workshops on this topic have been delivered in the past, and therefore the key lies in systematic and ongoing communication, rather than "one-off" presentations.

Issues such as the influence of peer culture have been tackled in different countries in different ways. For example, in Denmark, they felt their Performance School programme achieved considerably more success after moving football players into school classes with athletes from other sports – such as swimmers, dancers and gymnasts. Given that participants in these sports are known for their dedication from a young age, it was observed that a peer culture was created which "dragged up" the habits of the footballers, rather than being "dragged down" by

friends who were drinking, taking drugs, or involved in anti-social behaviour throughout adolescence. In other examples, residential academy programmes provide clubs the opportunity to influence the entire development of the player – not only on the pitch, but in their education, lifestyle, and off-field routines. To our understanding, no such attempts have been made within Scottish football to tackle the issues mentioned at the beginning of this chapter in such a way.

**Issue 5: Summary of Potential Solutions**

- Consider how to improve the quality and frequency of psychological and mental skills training for players throughout the development and transition phase.
- Establish an Scottish FA-led project, in partnership with clubs, to improve communication strategies and education for parents.
- Consider extending the amount of formal competition that exists within Club Academy Scotland.

## Issue 6: Issues with Youth Development

Another common theme highlighted across our consultations was "players not being ready" for the 1st Team by the end of their academy journey. While this issue can partially be helped by the solutions listed for Issue 1, a number of wide-ranging comments were focused on the Youth Development phase. A summary of the issues raised through out consultations has been provided below.

**Issues with the Grassroots Base**

- Lack of basic movement fundamentals
- Lack of basic technical fundamentals
- Lack of educated coaches working with local clubs

**Issues with the 8-11 Development Phase**

- Lack of expertise in the development of coordination
- Academies focusing on 'Skill Development' in presentations, but not in the reality of daily work – focusing on large group training rather than mastering the ball
- "The system is eliminating dribblers"

**Issues with the 12-15 Development Phase**

- Lack of education in the management of the Growth Spurt, including overtraining and avoidable injuries
- Academies jumping too quickly to team-focused development, rather than focusing on individual player development
- Position-specific training, rather than holistic development
- Lack of full-time coaches
- Lack of appropriate physical development
- Lack of tactical understanding linked to the demands and style of play of the modern game at the elite level

- "Very technical, we drive technique, technique, technique." Fromer Athletic Bilbao Academy Director Jose Maria Amorrortu on their training methodology

- "Technical repetition is the foundation of everything we do, which is why we are successful not only in football, but in all sports that we participate." Ivan Kepcija, author of the Croatian Football Federation Curriculum, former manager of Dinamo Zagreb Academy

- "Maybe they are not doing it correctly." Former Barcelona Academy Director Albert Capellas on those questioning the effectiveness of unopposed technical work

- "Technique is the most important thing for an Ajax player." Co Adriaanse, former Academy Director of Ajax

- "In our way of working, the game is not the teacher. The coach is the teacher." Mads Davidsen, Head of Football at Right to Gream Group

"Before U13, we invest 1 million euros per year in 100 partner clubs, and focus on the development of those clubs, because they are responsible for finding and developing the talent at a key stage. We also give them 5% of the future sale of a player which comes from their club, a significant amount for a local club."

- Roberto Olabe, Sporting Director at Real Sociedad, one of Europe's top academies. Sociedad's model of focusing on improving the grassroots base through a partner-club system, a common model with Europe's best academies, but has not been replicated within Scottish football

**Lack of 'Elite' Development**

Another issue which was raised a number of times with regards to Youth Development was the lack of 'Elite' mentality and processes which exist throughout our game. Some comments which were made by individuals working at clubs have been listed below:

- Talented players spread thin across too many academies, preventing a 'Best v Best' environment.
- Too much variability in competition with the games programme, preventing a 'Best v Best' environment.
- Talented staff members spread thin across too many academies, leaving clubs struggling to find educated staff members across all disciplines, including Coaching, Sport Science and Scouting.
- "Academy coaches often spend more time coaching the 'worst' players than top players".
- Lack of willingness to increase funding in academies, stemming from a lack of Board-level strategic approach.
- Club Academy Scotland Licence Criteria not currently offering an effective quality control system to ensure elite development takes place.
- Academies "going overboard on player strengths and over praising them, trying to keep the boy at the club".
    - Players who receive too much praise too soon losing motivation.
- A lack of understanding of Academy Coaches around the level and demands of elite football across Europe.
- A lack of educated physical development staff to develop players with the physical capacity to play elite football.
- A lack of top-down management or quality control by club boards on the workings of the academy, due to not having a board member with a background in elite development.

While a thorough analysis of all possible solutions to the issues listed within the Youth Development phase is out with the scope of this report, based on the feedback received above, the authors recommend that a report on the transition phase is followed by a thorough analysis of player development across all levels of our game.

**Issue 6: Summary of Potential Solutions**

- Scottish FA to lead on a thorough analysis of player development at all levels of the game, followed by a menu of recommendations for change.

## Issue 7: Issues with CAS Criteria & Funding System

Linked to the aforementioned issues around Youth Development, the current Club Academy Scotland Licence Criteria and funding system was frequently brought up during our consultations with clubs. The following issues were mentioned:

- A number of clubs admitting the current criteria is a 'tick box' system which does not actually represent the quality of work within the academy.
- Clubs admitting to notable failings within the academy, such as lack of access to training facilities throughout the season, or not having a gym which can be used by players, despite achieving 'Elite' status.
- The Scottish FA minimum criteria being taken literally by board members at clubs, who are unwilling to invest in the academy above the minimum requirements outlined to achieve 'Elite' status, rather than understanding the player development process.
- No opportunity for clubs to make proposals specific to their academy which are outside the boundaries of the current structure, but they feel will enhance player development.
- The lack of resource within the Scottish FA to follow up on the submissions by clubs.
- The creation of a 'chicken and egg' problem in the development of young coaches – who are not able to reach or receive funding for advanced coaching licences without being part of a professional academy; but not being able to join a professional academy, without having an advanced coaching license.
- The funding being spread over 27 clubs, in spite of the nation having a small talent pool, which is opposed to the 'Best v Best' strategy.
- Significant sums having been invested by the Scottish FA over the past decade up-front in a criteria-based system, with questionable value for money, and no guarantee that young players will receive the opportunity to play. A system which rewards clubs based on output, rather than input, was suggested by a number of stakeholders.

In response to the points listed above, we propose to combine a report on Player Development with a review of the current CAS system, which operates in 3-year cycles, and therefore ends the current cycle in 2026.

### Issue 7: Summary of Potential Solutions

- Combine a review of Player Development with a review of the Club Academy Scotland Licence Criteria, followed by recommendations for change, in advance of the current cycle of funding closing at the end of the 2024/25 season.
- Assess opportunities for a more qualitative assessment structure, including allocating resource for in-person visits to academies, proper review of document submissions, and discussion around areas of flexibility.
- Review the current input-based funding structure and assess whether this generates an appropriate return on investment.

## Issue 8: Lack of Rules / Quotas

An issue that was mentioned by a number, although not the majority of clubs, was the lack of rules or quotas to protect the development of young players. Several individuals mentioned that previously enforced rules – such as the U20 Rule in the matchday squad – led to them making their debut in senior football at a young age.

It was also mentioned on several occasions that current GBE criteria may makes it "too easy" to bring players below a certain level into the Scottish game.

One of the authors of this report has experience working in countries with several different methods of protecting young player development, including:

- Rules that one or more U21 domestic player must be on the pitch at all times, or the team forfeits the game 3-0.
- Structuring the distribution of TV revenue to clubs based on an incentivisation system for playing domestic and / or young players who are eligible for the national team, rather than solely on league position.
- Limitations on the number of non-domestic players a club is able to register (for example, allowing a maximum of 4 or 8 foreign players).

While the author agrees that, naturally, such rules or quotas result in an increase in the amount of young player minutes around the country, we do not feel that such proposals would generate enough support among a majority of member clubs to be voted through as a change to the rules at this time, especially at Scottish Premiership level. Should member clubs feel collectively that the league should implement such rules or incentivisation structures, this is something which could implemented.

A potentially more realistic possibility could be the use of young player rules below the Scottish Premiership, where the majority of clubs are currently more likely to field a young player as a part of normal process. Again, this would depend on the appetite for such a change.

One suggestion which was proposed on a couple of occasions, which may be the most realistic step, was to utilise certain cup competitions as a trial for young player rules. Currently, a number of teams have commented anecdotally their belief that the recently changed format of cup competitions have increased the opportunity for young players to feature. Several clubs have also mentioned that allowing trialists during these summer games would enhance the opportunity for clubs to take a look at young players in a competitive environment.

**Issue 8: Summary of Potential Solutions**

- Knockout Cup Competitions offer potentially realistic option to trial a rule which mandates the involvement of young domestic player(s) born within, or before, a designated year.
- Pass on feedback regarding the desire to include trialists within certain cup competitions to appropriate stakeholders.

## Issue 9: Internal Scottish FA Processes

As part of this wide-ranging review into why Scotland is lagging behind comparable countries in the number of young players breaking through into 1st team football the process extended not only to consultation with external stakeholders, but also to feedback on a number of areas related to the Scottish FA's internal processes.

One clear issue, which was highlighted on a number of occasions via consultations with clubs, was that they would welcome more regular dialogue with the Scottish FA and feel communication channels could be improved. This communication could and would be around various issues – including ongoing formal and informal support on best practice in a range of areas – but also a more joined up approach to the development of the country's best players. Currently, a number of clubs feel that the communication between club and FA regarding feedback for players in the Performance Schools, National Youth Teams, or those who have been scouted but not selected for National Teams, could be enhanced at several levels.

Another issue of note is that while the aligned football strategy running throughout a club is one of the most important factors in the transition of players, a number of the world's top nations operate with a similar strategic approach at Association level. Currently, several issues can be highlighted on this front:

- The Scottish FA should continue with the development of a written technical strategy which links 'A' Squad to National Youth Team level. This should include a clear philosophy or Scotland DNA which permeates throughout our National Youth Team pathway and in to 'A' Squad. Although work has started on this project, this should continue as a priority.

- In the FIFA Talent Development Ecosystem Report it promotes the benefits of having a clear playing philosophy and highlights the distinction between the top 20 MAs, where 79% have a written playing philosophy in place, and the lower ranked MAs (21-100), as only 59% of them have such a philosophy. Most MAs that do have this philosophy in place implement it across the youth national teams (90%), coach education (64%) and senior national teams (68%)'

- The example of the U17 Men's National Team's Semi Final appearance at the European Championships in 2014, followed by no members of the squad transitioning to 'A' National Team level, highlight the issues around a results-focused approach at the younger age groups at Youth National Team level. Similar to clubs, the Scottish FA is also at risk of selection bias due to early physical maturation and current performance levels. The success of Belgium's 'Future Squad' model, where national youth team squads selected of players who were not 'currently ready' for the regular youth national team, producing more 'A' Squad players than the conventional squad, is another indicator of best practice. A long-term strategic view should be taken from board level about the best way to develop future 'A' National Team players as the sole focus of the Scottish FA's elite youth strategy.

- The Scottish FA Performance School strategy began in 2012, to provide more contact time, specialised coaching programmes, and a 'Best v Best' environment.

Given that a proposal exists for the Scottish FA to undertake a review of Youth Development in totality as a result of this report, we therefore propose the role of the Performance Schools to be included in this review.

- The Scottish FA currently has no specialist staff or programmes for arguably the two most important stages of a player's development – the window of foundational development before the age of 12, and the transition to senior football. Examples of other National Associations undertaking such programmes were discussed during our consultations with counterparts in comparable countries.

- Given the number of Scottish-born players moving to English club after the age of 16, and the number of English-born players eligible to play for Scotland, the Scottish FA should consider its cross-border strategy to support the development and integration of these players. A 'Player Management' programme should be considered.

- Due to the number of separate issues outlined in this report, the Scottish FA should consider how to target 'special projects' for development, based on priority and resource, and take a leading role in key areas that will impact the development of young Scottish players.

- In order to achieve best practice in the evolution of the modern game, a commitment to developing a Research & Innovation Hub which establishes links with universities across the country and uses research projects as a way to enhance understanding on a range of areas related to player development, is recommended.

- Given the stark numbers of young Scottish players playing senior football outlined in Section 2, but the considerable investments made over the past decade by the Scottish FA, a thorough review of current financial generation and distribution models is recommended.
    - The first area is centred around generating resource for reinvestment - for example, comparable nations have utilised a transfer levy system to generate additional funding for elite development. Romeo Jozak, former Technical Director of the Croatian Federation, described the way the success of the 'A' National Team funded elite development programmes by stating, "In Croatia we say, the adult team makes the money, and the youth teams spend the money".
    - The second area is concerned with maximizing return on investment. For example – has the past decade of input-focused CAS funding resulted in a generation of elite talent? Or for example, given the clearly highlighted trend in Section 3, should investment be focused on people instead of facilities? Additionally, how does the redistribution of funds from the qualification of the 'A' National team link to measurable performance outcomes centred around player development?

**Issue 9: Summary of Potential Solutions**

- Continue to develop a top-down, aligned football strategy which encapsulates both 'A' Squad and National Youth Teams which includes the development of a national playing philosophy.
- Consider a top-down, long-term approach for talent identification throughout national youth team level, without focusing on the long-term outcomes.
- Consider strategies to improve communication with clubs at academy level and the transition phase.
- Consider a Player Management system which extends across the border to Scottish players outside the country.
- Include the Scottish FA Performance Schools in a nationwide review of Player Development.
- Prioritise and allocate resource to impact 'special projects' for improvement, based on the findings of this report.
- Establish a network of partner Universities and an organized approach to Research & Innovation opportunities.
- Consider a Scottish FA-led strategy for player development in the key 7-12 age range.
- Review current models of Financial Generation and Distribution.

## Issue 10: Early Migration of Minors

Another frequently mentioned issue throughout our consultations was Clubs referencing that one or more of their best young talents, who they felt would have been given an opportunity to play at 1st team level, had left the country to a club in a Top 5 League before the age of 18.

On paper, this may seem beneficial to elite development – certainly, if those players were getting early exposure to senior football in Europe's most competitive competitions (as was the case with Ben Doak and Billy Gilmour), this would naturally be a positive step from the perspective of the National Team.

However, the reality, both through comprehensive data and anecdotal examples, are that the vast majority of players who leave their home country before the age of 18 do not have a positive experience. This has been discussed in detail in Section 3 on Trends in Success. This "negative experience" is negated when a young player first establishes himself as a 1st team player with considerable match experience in his home country, and then chooses the next club strategically, so as to ensure the best opportunity to play.

Examples actually exist within the Scottish context of players who have featured in the 1st Team in the Scottish Premiership moving to another club to play at U18 Level at another club. Given the data outlined in Section 3, this move is almost certainly a strategic misstep if the player hopes to attain a career at the elite level in the longer-term.

Furthermore, the continuous loss of players for training compensation sums when they turn 16 threatens the entire business model of the academy system. Comparable countries in Europe have a system which allows them to protect the registrations of players before the age of 16, to both protect the business model of youth development, and to protect against the early migration of the player. Scottish clubs currently have no such option.

It must also be noted than on several occasions, players who moved outside of Scotland reported doing so because, in their opinion, their club could offer them no clear pathway into senior football. Therefore, this issue cannot be solved with contractual protections alone.

Finally, the increasing number of players leaving the country at a young age suggests that the Scottish FA should consider the strategic approach to supporting these players. The Japanese Federation provided a clear example of this strategic approach when it opened an office in Frankfurt to offer holistic support to the increasing number of Japanese players who were moving to the region.

### Issue 10: Summary of Potential Solutions

- Find a solution which works within the Scottish context to offer clubs the ability to contract players before the age of 16, as currently happens across Europe.
- Prepare an education and communication strategy for parents and players about the data surrounding early migration (as discussed in Section 3), and the importance of early exposure to senior football.
- Consider a Player Management system which extends across the border to Scottish players outside the country.

## Issue 11: Goalkeepers

A specific topic which arose during our consultations was the unique challenges around the development of elite goalkeepers. It has been noted across all levels of our game that a shortage of talented young goalkeepers who are receiving adequate playing minutes within the senior game exists.

It should be noted that Scotland is not alone in this regard, as during a recent consultation with our colleagues at the Austrian Federation, they have recently undertaken a 'special project' led by the Federation aimed at developing elite goalkeepers for the future. This provides some context that the Scottish FA can, and should, play a leading role in solving this dilemma.

As part of this process, we also consulted with goalkeeper coaches, and professionals working in some of Europe's top academies, to generate a better understanding of this topic. Findings are summarised below:

- The most talented young goalkeepers at an academy are often drafted into the 1st Team as the 2nd or 3rd choice goalkeeper, which in turn leads to a lack of game time throughout the transition phase. The Cooperation system outlined in Issue 1 would be a major step in allowing these players to get experience in senior football, while still being able to play for the parent club if a necessary situation occurs.

- A recent report into the average age that a goalkeeper playing in the UEFA Champions League started to specialise in the position showed the age to be 13. The current Club Academy Scotland criteria mandates that clubs have two fixed goalkeepers beginning at U11. One of the most experienced Head Coaches we consulted, who has worked at the highest level of the game, noted that the best goalkeeper he had worked with started to learn the position at age 14.

- Given the information noted above, an Scottish FA-led '2nd chance system' for outfield players who are released from their academy at ages U12-U15, who wish to trial as a goalkeeper, could receive a predetermined amount of training weeks with a goalkeeper coach, in order to assess their potential for retraining as a full-time goalkeeper.

- It is also clear from the above information that the requirements of an elite goalkeeper extend far beyond ball-handling and shot-stopping abilities, which are easier to learn at an older age category than technical skills with the feet, for example. In Spain and Croatia, academies will often use the same goalkeeper in matches at the younger categories (as in Scotland), but the majority of their training programme is identical to outfield players at this stage. This helps to avoid early specialisation, while providing an introduction to the position, and fulfilling the need for a match-day goalkeeper. It is not uncommon for clubs to also rotate the goalkeeper in match days until the age of U11.

- As part of a club-wide strategic approach outlined earlier, the profile of goalkeeper a club wants to develop should be clearly linked to the Game Model and playing philosophy.

- Defending space is an increasing trend in the modern game for elite goalkeepers, and this is something that can be trained from an early age – for example, by starting in possession, and having to make a decision when the ball is turned over. Anecdotal feedback suggests foundational goalkeeping practice in Scotland tends to focus more on what happens in and round the 6-yard box, which is easier to learn at an older age category.

- Decision making is another increasing trend in the modern game for elite goalkeepers, but anecdotal evidence suggests our young goalkeepers do not receive a high amount of scenario-based training – for example, which pass is most appropriate to play depending on the pressing strategy of the opponent.

- The natural tendency of a young goalkeeper who is willing to take a risk in possession needs to be championed, harnessed and praised. The choice of pass can be developed and corrected within the older age categorises, but it is difficult to improve a goalkeeper who has lost the willingness to take risks at a younger age.

- It has been suggested that coaches who arrive at the Scottish FA UEFA B Goalkeeping License come with a lack of detail in what they coach, particularly outside of the 6-yard box / making a save. Ongoing development to the coach education pathway can help to educate goalkeeping coaches on the trends of the modern goalkeeper.

- Similar to the Transition Coach role with outfield players, some clubs out with Scotland have the Head of Academy goalkeeping work with young goalkeepers who are promoted to the 1st team, to provide a familiar face during this transition.

**Issue 11: Summary of Potential Solutions**

- Consider a Scottish FA-led 'special project' on the development of elite goalkeepers, including content on model performance for goalkeepers in different phases of the game, supported by a toolbox of best practice for goalkeeping coaches.
- Consider how the profile of the goalkeeper links to a club-wide game model through Club Academy Scotland Licence Criteria.
- Consider a Scottish FA-led '2nd chance' trial system for outfield players who have been released to re-train as goalkeepers.
- Implement a Club Cooperation system to allow young goalkeepers who are 2nd or 3rd choice at their club to gain experience in senior football.

## Issue 12: Facilities

A small number of clubs surveyed during our consultations mentioned access to facilities being an issue, even at elite academy level. In particular, the lack of available indoor facilities was highlighted as a challenge by one club, which costs young players a considerable amount of training time during the winter period.

It has also been discussed that, in spite of schools around Scotland having a wooden floor 'games hall', getting access to such facilities can be difficult. Moreover, Futsal, which has been shown to be an excellent tool in player development in a number of the world's elite football nations, can be played in such hard-court surfaces. Scottish FA Performance school players who have been consulted after leaving the programme have cited Futsal as the most fun and developmental part of their training experience. A switch to a futsal-focused curriculum during the winter months could provide academies with the simultaneous benefit of increased access to indoor facilities, combined with enhanced player development.

Multi-disciplinary facilities were also mentioned, with one elite academy not having access to a suitable level of gym for young players to have an appropriate strength & conditioning programme. The 1st Team Manager of the same club commented in a separate meeting that young players not being physically prepared for 1st team football was one reason that more young players did not feature in his team.

The quality of pitches at 1st team level was also mentioned as a potential barrier to a playing style which is more conducive to elite development. It must be noted that research (discussed in Section 3) has found that quality of facilities had no notable link to player development – and, in fact, a previous study the author is aware of showed a reverse correlation (poorer countries with less investment in facilities were producing more elite players). In contrast, the quality of staff working within youth development, and a board-led strategic approach were much more likely to impact the quality of young players coming through.

Furthermore, the issue highlighted in Section 1 of this report – that Scottish clubs have not adopted the player trading model implemented by comparable countries – has generated a 'chicken and egg' situation. The development and transition of players from the academy into the 1st team, who can then be sold on, would in turn generate the revenues for these clubs to reinvest in facilities. The issues highlighted by several clubs confirms that elite development should be considered as part of a Scottish FA Board-led project which is assessing the state of facilities and infrastructure across the country.

**Issue 12: Summary of Potential Solutions**

- The Scottish FA should consider how to further integrate Futsal as a part of player development process, both due to the potential for player development, and the availability of hard-court facilities within schools across the country. The Scottish FA may also need to support clubs with gaining access to these facilities at a political level.
- Providing examples of best-practice for club at Board level who want to pursue a strategy of player trading in order to increase revenues, which in turn increases opportunity for investment in facilities.
- Recommendation to the Scottish FA Board that elite development is considered as part of a review into facilities and infrastructure.

## Issue 13: Staff Development

"Are we really focusing on developing our coaches in ways that are going to be meaningful or are we just ticking boxes?"

The quote above from a key member of one club summarised an interesting thread of discussion which occurred across a number of our consultations. Given that FIFA's report on trends in the success of National Associations suggesting that coach development should be a central part of any successful Association strategy, it was interesting to observe that across a large number of consultations, clubs were keen for the Scottish FA to lead on further development opportunities for staff across the multi-disciplinary spectrum (coaches).

Among this discussion were comments that concepts like CPD events – where a guest speaker comes to share a "one off" presentation, or a club organising a study visit for coaches to observe best practice were positively received but having no tangible or meaningful impact on youth development across the country.

This correlates with research into the development of coaches which shows ongoing Mentoring or facilitating Communities of Shared Practice to be the most effective means of coach education. The key difference between the aforementioned CPD events or study visits is that they exit as a brief moment in time, whereas mentoring or communities of practice are part of an ongoing, consistent support network which allows the coach to exchange ideas and learn from others.

Attempts were previously made to establish these kind of ongoing development programmes through the Pride Labs, which seem to have been generally positively received, but are no longer in operation. Therefore, a space exists for the Scottish FA to consider how to best establish an ongoing network of 'education hubs' which could bring people together from clubs on a semi-regular basis, and specialize in different areas, for example:

- Coaches working at different phases of the development process would require differentiated learning opportunities.
- Individuals involved in the management of curriculums or programmes – for example, Academy Directors, can be supported in more specific ways related to their role.
- Specific multi-disciplinary Hubs can be provided – for example, specialist ongoing support in the physical development of players during the Growth Maturation period.
- Within the Transition Phase specifically, such ongoing Education Hubs already exist in comparable countries, and serves as an ongoing development process for Transition Coaches, Pathways Managers, etc.

### Issue 13: Summary of Potential Solutions

- Consider establishing several differentiated centralized education hubs, which brings staff together from clubs on a semi-regular basis to exchange best practice.

## Issue 14: Lack of Scottish FA Communication Strategy

Highlighted in our consultations with FIFA about the best practice of National Associations who have spurred player development was the importance of a clear and specific communication strategy around these areas. Notably, several clubs mentioned during the Consultation phase that the Scottish FA has not developed a strong enough communication strategy in all areas surrounding player development.

Once example exists around the recently published media articles regarding the proposals to introduce "professional contracts for 14-year-olds" – an article which lacked any deeper insight in to this topic, and therefore facilitated a narrative which was not understood within the proper context, nor influenced by the Scottish FA.

Given the significant amounts of data, qualitative research, and preparation that has gone into a project like this, an opportunity exists for the Scottish FA to lead on an effective communication strategy which extends beyond clubs to educate parents, fans and wider stakeholders into a range of the topics discussed in this report.

Furthermore, other comparable countries – for example, in Hungary – have made the transition phase a central point of their communication strategy. A league table of U21 Domestic player minutes is regularly updated and published, supported by articles around the topic, which generates significant interest and debate in the area by pundits and professionals.

FIFA High Performance Expert Ged Roddy – who was behind the establishment of England's extremely successful EPPP system, highlights the need for a simplified message that is drip fed over time, combined by forensic attention to details underneath. As this report focuses more on the latter, it is therefore essential to consider how to communicate such details effectively.

Finally, clubs below the Scottish Premiership within the professional pyramid have regularly spoken of their pride in having had a current of former Scotland International as part of their club during the player's transition to senior football. However, a lack of public recognition exists for the role of these clubs in the player's journey. Given the Trends observed in Section 3, such recognition would not only serve as a nod to the clubs themselves for role in the player's journey, but also as an education point for stakeholders across the game that the entire professional pathway has an important role to play in the transition phase of future Scotland internationals.

### Issue 14: Summary of Potential Solutions

- The Scottish FA should be more pro-active in its communication strategy around player development.
- "A simplified message that is drip fed over time, combined by forensic attention to details underneath".
- The communication strategy should recognize the part that clubs throughout the pyramid have played in the journey of individuals who go on to achieve a career within the 'A' National Team or a Top 5 League.

## Issue 15: Lack of Ongoing Management

Throughout the process of compiling this report, it must be highlighted that a large number of positive changes have been attempted in Scottish football over the past 10+ years, including in a number of the areas recommended in this report, but have since been discontinued, or suffered from a lack sustained resource or of ongoing management.

Therefore, this report would highlight that the role of the Scottish FA is not complete simply by recommending and implementing change. It is the successful implementation of these changes which will bear fruit in the long-term development of the national game.

To provide some examples on a very basic level – programmes to develop the foundation phase of the player (2020 Centres), Futsal, or ongoing staff development (Pride Labs) have already been initiated in the past. Concepts like Club Academy Scotland have established a method of quality control for our academies but have no resource for ongoing management and quality control, meaning that the Scottish FA has no real mechanism to understand how well clubs do, or do not, follow the criteria outlined to achieve a certain licence status.

To conclude, it is vital for the Scottish FA to consider not only how to implement positive change, but how to ensure that such changes are managed correctly.

### Issue 15: Summary of Potential Solutions

- Previous experience has shown that the Scottish FA has launched a number of projects over the past 10+ years, but these projects have suffered from a lack of management or follow-up. Many projects have been discontinued or are resourced in a way which means they cannot be managed effectively.
- Notable improvement in our national game will require consistent and ongoing management of a range of projects over the long-term, to ensure that they are able to deliver the objectives set out in their foundation.

## Issue 16: Pressure on Head Coaches/Managers

Whilst not directly linked to the transition of young players, throughout our consultations, the level of pressure on Head Coaches and / or Managers was highlighted frequently. It was also mentioned that we no longer have a support structure similar to the LMA in England to provide an ongoing mechanism of support to individuals working these positions.

Therefore, while not directly linked to the topic of this report, the authors felt it important to mention this as another recommendation based on our consultations.

**Issue 16: Summary of Potential Solutions**

- Consider the organisation and implementation of an LMA-style support system for Head Coaches and Managers working at 1st Team level.

# Section 5.

# The Menu

## List of Potential Solutions

**Issue 1: Gap Between U18s and 1st Team**

- Provide education opportunities for clubs at board level on the importance of player pathway planning as an investment in the long-term development of the player.
- Implement an initial 1-season trial of Cooperation System.
- Raise the topic of the International Window to the SPFL, to consider how clubs and / or our National Teams would be affected by more National Youth team players featuring below the Premiership
- Consider several changes to the current U18 Academy structure.
    - Scheduling games after, rather than before, 1st Team matches.
    - Allowing an 'opt out' system.
    - Allowing a certain number of overage players to participate.
- Creation of a 'Development List' platform, which allows clubs to place, and easily identify, young players who are available for loan.

**Issue 2: Lack of Strategic Approach**

- Establish a method of ongoing support for clubs at Board level who wish to implement a club-wide football strategy.
- Organise Seminars with guest speakers who are experts in Football Strategy to present to decision makers at Boardroom level.
- Consider how the strategic approach of a club is represented in the Club Academy Scotland Licence Criteria.

**Issue 3: Lack of Individual Player Support in Transition Phase**

- The Scottish FA to establish a more structured and regular communication with clubs, parents and agents to support the development of the nation's best young talents in the transition phase.
- Given the number of young players moving to England at a young age, the Scottish FA should consider how to expand this communication strategy across borders.
- The Scottish FA to establish an Education Hub with in-person meet-ups and guest speakers to share best practice with those individuals working as Transition Coaches or similar roles within clubs.
- Consideration of how to link Individual Development Plans and the quality of work carried out in the transition phase to Club Academy Scotland Licence Criteria.

**Issue 4: Size of the Leagues**

- Feedback regarding the strong desire throughout the pyramid for larger league sizes to be forwarded to board members across the Scottish FA, SPFL and PGB for consideration.

**Issue 5: Mentality, Parental & Cultural Influences**

- Consider how to improve the quality and frequency of psychological and mental skills training for players throughout the development and transition phase.
- Establish a Scottish FA-led project, in partnership with clubs, to improve communication strategies toward, and education workshops for, parents.
- Consider extending the amount of formal competition that exists within Club Academy Scotland.

**Issue 6: Issues with Youth Development – "Players are Behind"**

- Scottish FA to lead on a thorough analysis of player development at all levels of the game, followed by a menu of recommendations for change.

**Issue 7: Issues with CAS Criteria & Funding System**

- Combine a review of Player Development with a review of the Club Academy Scotland Licence Criteria, followed by recommendations for change, in advance of the current cycle of funding closing at the end of the 2024/25 season.
- Assess opportunities for a more qualitative assessment structure, including allocating resource for in-person visits to academies, proper review of document submissions, and discussion around areas of flexibility.
- Review the current input-based funding structure and assess whether this generates an appropriate return on investment.

**Issue 8: Lack of Rules/Quotas**

- Explore Knockout Cup Competitions as a potentially realistic option to trial a rule which mandates the involvement of young domestic player(s) born within, or before, a designated year.
- Pass on feedback regarding the desire to include trialists within certain stages of cup competitions to appropriate stakeholders.

**Issue 9: Internal Scottish FA Processes**

- Consider a top-down, aligned football strategy which encapsulates both 'A' Squad and National Youth Teams.
- Consider the development of a national playing philosophy.
- Consider a top-down, long-term approach talent identification throughout national youth team level, without focusing on short-term results.
- Consider strategies to improve communication with clubs at academy level and the transition phase.
- Consider a Player Management system which extends across the border to Scottish players outside the country.
- Include the Scottish FA Performance Schools in a nationwide review of Player Development.
- Prioritise and allocate resource to impact 'special projects' for improvement, based on the findings of this report.
- Establish a network of partner Universities and organized approach to Research & Innovation opportunities.
- Consider a Scottish FA-led strategy for player development in the key 7-12 age range.
- Review current models of Financial Generation and Distribution.
- Research & Innovation Hub
- Financial Generation & Distribution

**Issue 10: Early Migration of Young Players**

- Find a solution which works within the Scottish context to offer clubs the ability to contract players before the age of 16, as currently happens across Europe.
- Prepare an education and communication strategy for parents and players about the data surrounding early migration (as discussed in Section 3), and the importance of early exposure to senior football.
- Consider a Player Management system which extends across the border to Scottish players outside the country.

**Issue 11: Goalkeepers**

- Consider a Scottish FA-led 'special project' on the development of elite goalkeepers, including content on model performance for goalkeepers in different phases of the game, supported by a toolbox of best practice for goalkeeping coaches.
- Consider how the profile of the goalkeeper links to a club-wide game model through Club Academy Scotland Licence Criteria.
- Consider a Scottish FA-led '2nd chance' trial system for outfield players who have been released to re-train as goalkeepers.
- Implement a Club Cooperation system to allow young goalkeepers who are 2nd or 3rd choice at their club to gain experience in senior football.

**Issue 12: Facilities**

- The Scottish FA should consider how to further integrate Futsal a part of player development process, both due to the potential for player development, and the availability of hard-court facilities within schools across the country. The Scottish FA may also need to support clubs with gaining access to these facilities at a political level.
- Providing examples of best-practice for club at Board level who want to pursue a strategy of player trading in order to increase revenues, which in turn increases opportunity for investment in facilities.
- Recommendation to the Scottish FA Board that elite development is considered as part of a review into facilities and infrastructure.

**Issue 13: Staff Development**

- Consider establishing several differentiated centralised education hubs, which brings staff together from clubs on a semi-regular basis to exchange best practice.

**Issue 14: Lack of Narrative Control**

- The Scottish FA should be more pro-active in its communication strategy around player development.
- "A simplified message that is drip fed over time, combined by forensic attention to details underneath".
- The communication strategy should recognise that part that clubs throughout the pyramid have played in the journey of individuals who go on to achieve a career within the 'A' National Team or a Top 5 League.

**Issue 15: Lack of Ongoing Management**

- Previous experience has shown that the Scottish FA has launched a number of projects over the past 10+ years, but a number of these projects have suffered from a lack of management or follow-up. Many projects have been discontinued or are resourced in a way which means they cannot be managed effectively.
- Notable improvement in our National Game will require consistent and ongoing management of a range of projects over the long-term, to ensure that they are able to deliver the objectives set out in their foundation.

**Issue 16: Pressure on Managers / Head Coaches**

- Consider the organisation and implementation of an LMA-style support system for Head Coaches and Managers working at 1st Team level.

# Section 6.

# Transition Phase in the Girls & Women's Pathway

While this report has centred on the transition of young players aged 16-21 to senior football within the Men's pathway, due to the data, insights and trends which clearly show challenges, we also believe that this topic deserves further consideration within the Girls & Women's game as it continues to grow and professionalise.

To provide some background context, the women's elite club game in Scotland currently operates as a two-tier pyramid under the Scottish Women's Premier League (hereafter termed 'SWPL' and 'SWPL2'). The NextGen programme is the name given to the Scottish FA's Elite performance program for girls aged 12-18, with clubs ranked in two tiers based on an audit system.

Whilst there is a lack of long-term data and definitive trends, we would like to outline several potential challenges, along with some considerations, within the women's game at the transition phase.

First, the challenge of developing academy prospects with potential into senior players exists in similar ways to the men's game, but with some added nuance. While data shows the benefit to B Team Structures, Cooperation Agreements or Strategic Loans in the Men's game around Europe, allowing young players to get senior experience at a lower division in the pyramid before returning to play at the top division, such solutions are less practical within our context due to a larger gap in professionalisation existing between our divisions. Thus, finding an appropriate pathway becomes more complex.

On the flip side, English clubs are increasingly using the SWPL as a development league for which to loan their young talents, providing a good stepping stone for their pathway, but potentially narrowing the opportunity for internal loans within our top division.

Secondly, anecdotal feedback points to some other challenges within the transition phase. As with the men's game, UEFA Homegrown Criteria applies to clubs which qualify for Europe, which means that a number of talented young players will not be allowed to leave on loan to gain senior experience. While B Teams or Cooperation Agreements can provide a solution, the aforementioned issue around the level of SWPL2 makes this suboptimal within our context. An official loans system which encourages club to club player movement within the SWPL began last season, and more time will be needed to assess the impact. Current data from one season appear to have some challenges, with most loans not providing a high volume of player minutes. However, it is worth mentioning one of the Trends observed in the Men's game is that the "challenging loan" can still be a precursor for future success of a player, and such a loan is likely to be more beneficial than continuing to play academy games within the comfort zone of the player.

Additionally, anecdotal feedback highlights that the reverse challenge also exists due to the lack of resource and squad depth, which means a talented young teenager who is able to hold her own in the SWPL may be exposed to a lot of senior minutes immediately. This aligns with a trend we have observed within the Men's game that often young players develop best when gradually adapted to the 1st team environment, and overexposure may lead to increased risk of injury or psychological stress. Therefore the transition phase is often best handled with nuance, rather than a black and white perspective that more minutes always means better development – and while lack of resource is cited within our Men's game for having a lower frequency of Transition Coaches, Performance Psychologists and Elite Sport Science to support the individual holistically in this phase compared with European counterparts, these support mechanisms are obviously further stretched within the much less resourced SWPL. Particularly highlighted via anecdotal reports is the need for improved Strength & Conditioning, physical preparation, education on nutrition and injury prevention for our top young female players, and greater medical support for those suffering injuries, with some players not even having access to a physio or private scans to diagnose and determine injuries.

It is worth noting that the Scottish FA previously supported the Women's National Performance Centre in partnership with Stirling University in an attempt to provide an elite, full-time training environment for players within the transition phase. However, the current pathway focuses on the larger clubs, who are increasingly better resourced, taking care of their own players in-house. We are currently not aware of any data which contextualises the difference in outcome since these changes.

Another interesting difference with our men's game can be found around the approach to League sizes. Whilst we have received strong and frequent feedback from stakeholders that the small league sizes in the men's game are an obstacle to increasing young player minutes, the SWPL is currently in the process of changing from a 12 team league to a 10 team league, citing a need to increase the competitiveness and align the demands of the game with the development of the professional athlete. This again shows that a specific approach is needed to match the different context within the Women's game. In addition to the desire to create a more competitive environment, there are additional pressures placed on the women's game domestically in Scotland by the FIFA international calendar – excluding major tournaments, the proposed FIFA calendar from 2026 has 13 matchdays, 54 release days and 8 weekends (an increase on 5 from the existing calendar). The relationship between women's leagues / clubs and UEFA / FIFA are far less advanced, so the limited consultation results in calendars that are built around an increasing number of international matches and less time spent in the club environment.

Regarding the development phase responsible for producing young players who are ready to take part in senior football, a major obstacle which exists within our game is the lack of investment due to a lack of potential return. While transfer fees represent the largest form of potential revenue within the men's game, providing an organic incentive for player development for clubs, the opposite situation occurs within the women's game. One club highlighted the work they put in to organizing a Youth Academy only to lose their best players for free whenever a talented young player is on the cusp of their 1st Team. FIFA has announced a new Transfer Compensation system is in development, which we believe will be implemented in the season after next, at the earliest, in order to tackle this issue. This Compensation system will create the incentives for Clubs to improve their development structure and provide a potential mechanism for reinvestment for those who are successful in developing elite talent. Detail on the specific

sums clubs will receive is limited, but we understand this will be centrally funded via a direct contribution from FIFA and a 1% levy on men's transfer fees. The modelling undertaken by FIFA suggests that this will result in a total annual pot of $48m (USD).

As a concluding comment on the challenges within the women's game, it has also been anecdotally observed that the pressure on the Head Coach for results is being increased as the level of investment and expectation in the game increases – with coaches departing clubs due to poor results being a relatively new phenomenon in our context - a trend which has clearly been observed within the men's game. With this in mind, the 'strategic approach' of the club becomes the most important factor in the transition of young players to senior football. As more clubs in the women's game employ Technical Directors, Heads of Girl's & Women's Football, and similar positions – we would emphasize the sharing of best practice in developing a strategic approach to ensure that clubs do not fall into a cycle of short-term decision making.

Finally, it should be noted that if this report is successful in improving the volume and quality of opportunities available to young male players, a successful Men's National team provides the FA with a significant source of income, which increases the opportunity to target further improvements across all areas of the game, including our Girls & Women's Pathway.

Based on all of the above, it is our recommendation that a more detailed and evidence-based review is carried out on the transition phase within the women's game to either substantiate or dismiss these anecdotal reports.

In the meantime, we provide several suggestions worthy of consideration in any such further review:

- In the short to medium term, increased gathering of objective and subjective data on the effectiveness of different pathways within the transition phase. For example, some anecdotal evidence suggests that loans to the lower leagues within English Football may be an effective mechanism for young players to gain experience before returning to SWPL clubs. This data can help inform a review of best practice using the loan system.

- An increase in Scottish FA-led education and knowledge sharing around best practice in the successful development of young players throughout the transition phase, in addition to supporting Heads of Girls & Women's football at clubs in developing a strategic approach.

- Consideration of a potential games programme within the transition phase to "bridge the gap" between youth and senior football, both at club and international level

- A consideration of appropriate rules, levers, or incentives to protect and promote the development of young Scottish-eligible players.

- An ongoing review of the NextGen scheme as it starts to develop, which provides financial support and expertise for girl's academies around the country, along with the SWPL Club Licensing, to ensure that funding is allocated in the best way and supported by appropriate criteria, conditions and KPIs.

Finally, this report concludes by noting the successful application for funding from FIFA's Talent Development Scheme by the Scottish FA. This funding has been provided to support 5 areas outlined by the Scottish FA to develop and support Girls & Women's Football:

1. Introduce a National U23s to support talented young players in the Transition Phase
2. Introduce a Structured U16s Programme
3. Regional & National Scouting System
4. Regional Talent ID & Development
5. Coach Development & Female Coach Pathway

While the FIFA Talent Development Scheme provides a good opportunity to improve and develop our Women's game, we again recommend establishing appropriate KPIs and management processes to ensure that money spent on these 5 areas is on track to helping us achieve our intended outcomes.

There may also be merit in talking about the continued development of the game such as the proposed new UEFA club competition beneath the Champions League and as highlighted above the proposed new FIFA compensation matrix which may also encourage clubs to consider more investment into their player development programmes.

# Appendix A

## Consultation List

**Scottish FA Internal Consultations & Current Role**

Steve Clarke (*Manager, Scotland 'A' National Team)*

John Carver (*Assistant Manager, Scotland 'A' National Team)*

Callum Beattie *(Chief Operating Officer, SPFL)*

Gary Booth (*Chief Governance Officer, SFA)*

Fiona McIntyre (*Managing Director, SWPL)*

Michael McArdle (*Girl's & Women's Performance Manager)*

**Scottish Clubs Consulted & Individuals Spoken To**

**Scottish Premiership Clubs**

*Aberdeen FC (*Stephen Gunn, Stuart Glennie)

*Celtic FC (*Brendan Rodgers, John Kennedy, Chris McCart)

*Dundee FC (*Tony Docherty, Stuart Taylor)

*Hearts FC (*Joe Savage, Steven Naismith, Gordon Forrest, Frankie McAvoy, Paul Gallagher, Liam Fox, Andy Webster)

*Hibernian FC (*Brian McDermott, Gareth Evans)

*Kilmarnock FC (*Derek McInnes, Paul Sheerin, Alan Archibald, Craig Clark, Frazer Stewart, Paul Di Giacomo, Chris Burke)

*Livingston FC* (David Martindale, Neil Hastings, Brian Rice)

*Motherwell FC (*Stuart Kettlewell, Stephen Frail, David Clarkson)

*Rangers FC* (Creag Robertson, Philipe Clement, Nils Koppen, Brian Gilmour, David McCallum, Zeb Jacobs)

*Ross County FC (*Steven Ferguson, Don Cowie, Carl Tremarco)

*St Johnstone FC (*Gus MacPherson, Craig Levein, Andy Kirk)

*St Mirren FC (*Keith Lasley, Stephen Robinson, Diarmuid O'Carroll, Jamie Langfield, Alan McManus)

**CAS Elite Clubs**

*Hamilton Accies FC (*John Rankin, George Cairns)

*Queens Park FC (*Callum Davidson, Tommy McIntrye)

*Dundee United FC (*Jim Goodwin, Paul Cowie)

**General 'All Club' Meetings**

SPFL Championship Meeting

SPFL League 1 Meeting

SPFL League 2 Meeting

Lowland League Meeting

**External Consultations & Key Relevant Experiences**

Ged Roddy (*FIFA High Performance Expert* & *Former Director of Football Development, English Premier League)*

Callum Irving (*FIFA Talent Development Programme)*

Pouya Yaghoubinia (*Football Development Manager, European Clubs Association)*

David Viejo (*Former Academy Coach & Scout, Real Madrid)*

Ivan Kepcija (*Author, Croatian Federation Curriculum*; *Former Academy Director, Dinamo Zagreb* & *Former Sporting Director, Hajduk Split)*

Mads Davidsen (*Head of Football at Right to Dream Group*; *Author & Guest Speaker on Elite Football Strategy)*

Huw Jennings (*Head of Football Development, Fulham FC)*

Ernst Tanner (*Sporting Director, Philadelphia Union* & *Former Academy Director, Red Bull Salzburg)*

Michael Beale (*Former 1st Team Manager, Rangers FC*; *Former Elite Academy Coach, Chelsea and Liverpool FC)*

Steve Avery (*Academy Director, Charlton FC)*

Dr Robert Barczi (*Technical Director, Hungarian Football Federation)*

Peter Schoettel (*Technical Director, Austrian Football Federation)*

Tomislav Kasalo (*FIFA Judge & Sports Law Expert)*

Josip Tomasko (*Head of Internation Affairs, Croatian Football Federation)*

Tony Caig (*Head of Academy Goalkeeping, Newcastle FC*; *Scottish FA Coach Educator Goalkeeping Pathway & Former Scotland U21 National Team Goalkeeper Coach)*

Max Lankheit (*PhD in Football Strategy& Former Head of Performance, Philadelphia Union)*

Des Ryan (*Former Head of Academy Medicine & Athletic Development, Arsenal FC)*

Jon de Souza (*Former 1st Team Transition Coach, Charlton FC)*

Frazer Robertson (*1st Team Transition Coach, Standard Liege)*

**A much wider range of other sources, accumulated over of the years by the authors, have been included in the report. Only those individuals who were formally consulted for this project have been listed.*

# Appendix B

## 2023/24 Player Minutes Project

**Quantifying 1st Team Opportunities For Scottish Players**

# Overview

- The aim of this project was to try to quantify the 1st team opportunities being given to:
  - Scottish players
  - Our younger Scottish players.
- It forms part of a larger project looking at strategies to increase the number of players making the successful transition from Academy to 1st Team.
- The data was generated on an individual player basis, providing the opportunity to view and better understand the landscape on a league and individual club level.
- Young players are defined here as being born on or after the 1st January 2002.
- The data was generated on the first 33 games that each team played in the 2023-24 season.

# Assumptions & Definitions

| Assumptions | |
|---|---|
| 1 | All player-minutes data was collected from the FlashScore app. |
| 2 | Other player data was generated using the Transfermarket app and the worldfootball.net website |
| 3 | Data relating to payer nationality was generated using the worldfootball.net website |
| 4 | Age is represented as age at 1st January 2023. |
| 5 | Data has been generated on the first 33 games played by each team in the 2023-24 season. |
| 6 | Player Loans and transfer data was generated based on Scottish FA records and Transfermarket.com |

| Definitions | |
|---|---|
| Start Minutes: | Number of minutes played when a player was in the starting lineup. |
| Sub Minutes: | Number of minutes played when a player came on as a substitute. |
| In Squad DNP: | When a player was on the bench but did not play any minutes. |
| Not in Squad: | When a player was not listed in the match day squad. |
| Loan Minutes: | The number of minutes played by a player at his Loan club. |

# Scottish Players – 1st Team Minutes

## Scottish Premiership

| All Scottish Players - 1st Team Minutes | | |
|---|---|---|
| | Games Played | Season Average |
| Aberdeen | 33 | 29.7% |
| Celtic | 33 | 23.0% |
| Dundee | 33 | 42.0% |
| Hearts | 33 | 37.7% |
| Hibs | 33 | 18.6% |
| Kilmarnock | 33 | 47.9% |
| Livingston | 33 | 54.4% |
| Motherwell | 33 | 37.2% |
| Rangers | 33 | 9.6% |
| Ross County | 33 | 30.5% |
| St Johnstone | 33 | 35.5% |
| St Mirren | 33 | 26.5% |

| | |
|---|---|
| Average Across League | 32.7% |

## Scottish Championship

| Scottish Championship: All Scottish Players | | |
|---|---|---|
| Club | Games Played | Season Average |
| Airdrionians | 33 | 68% |
| Arbroath | 33 | 73% |
| Ayr United | 33 | 42% |
| Dundee United | 33 | 67% |
| Dunfermline | 33 | 76% |
| Inverness | 33 | 45% |
| Morton | 33 | 73% |
| Partick Thistle | 33 | 94% |
| Queens Park | 33 | 52% |
| Raith Rovers | 33 | 87% |

| | |
|---|---|
| Average Across League | 67.8% |

## Main Findings:

- Only one third of all the total minutes played in our top league were played by Scottish players.
- Only one club in the Scottish Premiership (Livingston) had more than half of their total minutes played by Scottish players.
- Two clubs in the Scottish Championship had less than half of their total minutes played by Scottish players

# U21 Scottish Players: 1st Team Minutes

## SCOTTISH PREMIERSHIP

### % Of All Minutes Played By U21 Scottish Players For Their Club

| U21 Scottish Players - 1st Team Minutes | | |
|---|---|---|
| | Games Played | % of All Minutes Played |
| Aberdeen | 33 | 7.0% |
| Celtic | 33 | 0.3% |
| Dundee | 33 | 10.8% |
| Hearts | 33 | 4.8% |
| Hibs | 33 | 1.6% |
| Kilmarnock | 33 | 6.4% |
| Livingston | 33 | 1.8% |
| Motherwell | 33 | 4.2% |
| Rangers | 33 | 0.1% |
| Ross County | 33 | 4.0% |
| St Johnstone | 33 | 1.7% |
| St Mirren | 33 | 2.0% |
| Average Across League | | 3.7% |

### Minutes Played By U21 Scottish Players For Their Club

| U21 Scottish Players - 1st Team Minutes | | |
|---|---|---|
| | Total Minutes Played | Equivalent 90-Minute Games Played |
| Aberdeen | 2,290 | 25.4 |
| Celtic | 89 | 1.0 |
| Dundee | 3,538 | 39.3 |
| Hearts | 1,574 | 17.5 |
| Hibs | 538 | 6.0 |
| Kilmarnock | 2,080 | 23.1 |
| Livingston | 584 | 6.5 |
| Motherwell | 1,865 | 20.7 |
| Rangers | 26 | 0.3 |
| Ross County | 1,320 | 14.7 |
| St Johnstone | 547 | 6.1 |
| St Mirren | 650 | 7.2 |
| TOTALS | 15,101 | 168 |
| League Average | 1,258 | 14 |

### Main Findings:

- Less than 4% of all minutes played in the Scottish Premiership were by Scottish players aged 21 or younger.
- Only 3 of our Premiership clubs had more than 5% of their total minutes played by U21 Scottish players.

# U21 Scottish Players: 1st Team Minutes

## SCOTTISH PREMIERSHIP

Cumulative Minutes Played By U21 Scottish Players
(For Their Club + Out On Loan)

| U21 Scottish Players | | | | |
|---|---|---|---|---|
| | Minutes Played For Parent Club | Minutes Played Out On Loan | TOTAL MINUTES | Equivalent 90-Minute Games |
| Aberdeen | 2,290 | 4,816 | 7,106 | 79.0 |
| Celtic | 89 | 4,727 | 4,816 | 53.5 |
| Dundee | 3,538 | 3,089 | 6,627 | 73.6 |
| Hearts | 1,574 | 5,994 | 7,568 | 84.1 |
| Hibs | 538 | 1,929 | 2,467 | 27.4 |
| Kilmarnock | 2,080 | 1,902 | 3,982 | 44.2 |
| Livingston | 584 | 0 | 584 | 6.5 |
| Motherwell | 1,865 | 1,114 | 2,979 | 33.1 |
| Rangers | 26 | 5,368 | 5,394 | 59.9 |
| Ross County | 1,320 | 6,292 | 7,612 | 84.6 |
| St Johnstone | 547 | 5,378 | 5,925 | 65.8 |
| St Mirren | 650 | 2,633 | 3,283 | 36.5 |
| | | League Average | 4,862 | 54 |

## Main Findings:

- Less than 4% of all minutes played in the Scottish Premiership were by Scottish players aged 21 or younger.
- Only 3 of our Premiership clubs had more than 5% of their total minutes played by U21 Scottish players.

# U21 Scottish Players: 1st Team Minutes

## SCOTTISH CHAMPIONSHIP

### % Of All Minutes Played By U21 Scottish Players For Their Club

| U21 Scottish Players - 1st Team Minutes | | |
|---|---|---|
| Club | Games Played | Season Average |
| Airdrionians | 33 | 18% |
| Arbroath | 33 | 8% |
| Ayr United | 33 | 4% |
| Dundee United | 33 | 11% |
| Dunfermline | 33 | 16% |
| Inverness | 33 | 2% |
| Morton | 33 | 2% |
| Partick Thistle | 33 | 15% |
| Queens Park | 33 | 24% |
| Raith Rovers | 33 | 2% |
| Average Across League | | 10.2% |

### Minutes Played By U21 Scottish Players For Their Club

| U21 Scottish Players - 1st Team Minutes | | |
|---|---|---|
| | Total Minutes Played | Equivalent 90-Minute Games Played |
| Airdrionians | 5,833 | 64.8 |
| Arbroath | 2,567 | 28.5 |
| Ayr United | 1,368 | 15.2 |
| Dundee United | 3,647 | 40.5 |
| Dunfermline | 5,200 | 57.8 |
| Inverness | 775 | 8.6 |
| Morton | 66 | 0.7 |
| Partick Thistle | 4,838 | 53.8 |
| Queens Park | 5,736 | 63.7 |
| Raith Rovers | 440 | 4.9 |
| TOTALS | 30,470 | 339 |
| League Average | 3,047 | 33.9 |

### Main Findings:

- Only 10% of all minutes played in the Scottish Championship were by Scottish players aged 21 or younger.
- Almost 3 times more minutes were played by Scottish players aged 21 or younger in the Scottish Championship than in the Scottish Premiership.

# U21 Scottish Players: 1st Team Minutes

## League-1

### Minutes Played By U21 Scottish Players

| League 1 - All U21 Scottish Players | | |
|---|---|---|
| Club | Minutes Played by U21 Scottish Players | Equivalent 90-Minute Games |
| Alloa Athletic | 6,386 | 71 |
| Annan Athletic | 2,853 | 32 |
| Cove Rangers | 1,231 | 14 |
| Falkirk FC | 3,098 | 34 |
| Edinburgh City | 9,167 | 102 |
| Hamilton Accies | 1,772 | 20 |
| Kelty Hearts | 7,746 | 86 |
| Montrose FC | 3,240 | 36 |
| Queen of the South | 9,515 | 106 |
| Stirling Albion FC | 2,533 | 28 |
| TOTALS | 47,541 | 528 |
| League Average | 4,754 | 53 |

### % of Minutes Played by U21 Scottish Players

| League 1 - All U21 Scottish Players | |
|---|---|
| Club | % of Minutes Played by Scottish U21 Players |
| Alloa Athletic | 19.5% |
| Annan Athletic | 8.7% |
| Cove Rangers | 3.8% |
| Falkirk FC | 9.5% |
| Edinburgh City | 28.1% |
| Hamilton Accies | 5.4% |
| Kelty Hearts | 23.7% |
| Montrose FC | 9.9% |
| Queen of the South | 29.1% |
| Stirling Albion FC | 7.8% |
| League Average | 14.6% |

# U21 Scottish Players: 1st Team Minutes

## League-2

### Minutes Played By U21 Scottish Players

| League 2 - All U21 Scottish Players | | |
|---|---|---|
| Club | Minutes Played by U21 Scottish Players | Equivalent 90-Minute Games |
| Bonyrigg Rose Athletic | 1,843 | 20 |
| Clyde | 9,014 | 100 |
| Dumbarton | 7,589 | 84 |
| East Fife | 6,080 | 68 |
| Elgin City | 8,775 | 98 |
| Forfar Athletic | 6,901 | 77 |
| Peterhead | 7,035 | 78 |
| Stenhousemuir | 6,027 | 67 |
| Stanraer | 13,194 | 147 |
| The Spartans | 3,726 | 41 |
| TOTALS | 70,184 | 780 |
| League Average | 7,018 | 78 |

### % of Minutes Played by U21 Scottish Players

| League 2 - All U21 Scottish Players | |
|---|---|
| Club | % of Minutes Played by Scottish U21 Players |
| Bonyrigg Rose Athletic | 5.6% |
| Clyde | 27.6% |
| Dumbarton | 23.2% |
| East Fife | 18.6% |
| Elgin City | 26.9% |
| Forfar Athletic | 21.1% |
| Peterhead | 21.5% |
| Stenhousemuir | 18.4% |
| Stanraer | 40.4% |
| The Spartans | 11.4% |
| League Average | 21.5% |

# Leagues 1 & 2

## Main Findings:

- The equivalent of more than 1,300 games were played by U21 Scottish players in Leagues 1 & 2.
- Opportunities for playing minutes for U21 Scottish players in League -1 were 4 times higher than opportunities in the Scottish Premiership.
- U21 Scottish players played almost 6 times as many minutes for League -2 teams than for Scottish Premiership teams.
- More than 20% of all minutes played in League -2 were played by Scottish U21 players.

# U21 Scottish Players: Out On Loan

## U21 Players Loaned Out From Scottish Premiership Clubs

| U21 Scottish Players - On Loan | | |
|---|---|---|
| | Loan Player Minutes | Equivalent 90-minute Games |
| Aberdeen | 4,816 | 54 |
| Celtic | 4,727 | 53 |
| Dundee | 3,089 | 34 |
| Hearts | 5,994 | 67 |
| Hibs | 1,929 | 21 |
| Kilmarnock | 1,902 | 21 |
| Livingston | 0 | 0 |
| Motherwell | 1,114 | 12 |
| Rangers | 5,368 | 60 |
| Ross County | 6,292 | 70 |
| St Johnstone | 5,378 | 60 |
| St Mirren | 2,633 | 29 |
| TOTALS | 43,242 | 480 |
| Averages | 3,604 | 40 |

## U21 Players Loaned Out From Scottish Championship Clubs

| U21 Scottish Players - Out on Loan | | |
|---|---|---|
| | Loan Player Minutes | Equivalent 90 Minute Games |
| Airdrionians | 0 | 0 |
| Arbroath | 0 | 0 |
| Ayr United | 0 | 0 |
| Dundee United | 1,505 | 17 |
| Dunfermline | 500 | 6 |
| Inverness | 832 | 9 |
| Morton | 2,120 | 24 |
| Partick Thistle | 143 | 2 |
| Queens Park | 320 | 4 |
| Raith Rovers | 402 | 4 |
| TOTALS | 5,822 | 65 |
| Averages | 582 | 6 |

## Main Findings:

- While our U21 players may not be getting 1st team experience at their own clubs, a number are getting good 1st team experience while out on loan at other professional clubs.
- The equivalent of over 540 games were played by Scottish U21 players out on loan from their parent clubs.

# U21 Scottish Players: Out On Loan

## U21 SCOTTISH PLAYERS LOANED OUT FROM SCOTTISH PREMIERSHIP CLUBS

### U21 Players Loaned Out To Other Scottish Premiership Clubs

| U21 Scottish Players - Loaned To Other Scottish Premiership Clubs | | |
|---|---|---|
| | Loan Player Minutes | Equivalent 90-minute Games |
| Aberdeen | 0 | 0 |
| Celtic | 0 | 0 |
| Dundee | 0 | 0 |
| Hearts | 0 | 0 |
| Hibs | 0 | 0 |
| Kilmarnock | 0 | 0 |
| Livingston | 0 | 0 |
| Motherwell | 0 | 0 |
| Rangers | 1,259 | 14 |
| Ross County | 0 | 0 |
| St Johnstone | 0 | 0 |
| St Mirren | 0 | 0 |
| TOTALS | 1,259 | 14 |

### U21 Players Loaned Out To Other Scottish Championship Clubs

| U21 Scottish Players - Loaned To Scottish Championship Clubs | | |
|---|---|---|
| | Loan Player Minutes | Equivalent 90-minute Games |
| Aberdeen | 0 | 0 |
| Celtic | 2,924 | 32 |
| Dundee | 0 | 0 |
| Hearts | 2,844 | 32 |
| Hibs | 0 | 0 |
| Kilmarnock | 0 | 0 |
| Livingston | 0 | 0 |
| Motherwell | 0 | 0 |
| Rangers | 0 | 0 |
| Ross County | 1,891 | 21 |
| St Johnstone | 0 | 0 |
| St Mirren | 0 | 0 |
| TOTALS | 7,659 | 85 |

### U21 Players Loaned Out To Clubs Outside Scotland

| U21 Scottish Players - On Loan To Clubs Outside Scotland | | |
|---|---|---|
| | Loan Player Minutes | Equivalent 90-minute Games |
| Aberdeen | 0 | 0 |
| Celtic | 1,803 | 20 |
| Dundee | 0 | 0 |
| Hearts | 0 | 0 |
| Hibs | 0 | 0 |
| Kilmarnock | 0 | 0 |
| Livingston | 0 | 0 |
| Motherwell | 0 | 0 |
| Rangers | 0 | 0 |
| Ross County | 0 | 0 |
| St Johnstone | 0 | 0 |
| St Mirren | 0 | 0 |
| TOTALS | 1,803 | 20 |

# Leagues 1 & 2 – U21 Loan Players

## League 1: Minutes Played By On Loan U21 Scottish Players

| League 1 - Scottish U21 Players - On Loan | | |
|---|---|---|
| Club | Minutes Played by On Loan U21 Scottish Players | Equivalent 90-Minute Games |
| Alloa Athletic | 4,207 | 47 |
| Annan Athletic | 2,323 | 26 |
| Cove Rangers | 0 | 0 |
| Falkirk FC | 400 | 4 |
| Edinburgh City | 3,721 | 41 |
| Hamilton Accies | 0 | 0 |
| Kelty Hearts | 5,939 | 66 |
| Montrose FC | 1,988 | 22 |
| Queen of the South | 5,115 | 57 |
| Stirling Albion FC | 1,328 | 15 |
| TOTALS | 25,021 | 278 |
| League Average | 2,502 | 28 |

## League 1: Minutes Played by On Loan U21 Scottish Players

| League 1 - U21 Scottish Players - On Loan | |
|---|---|
| Club | % of Minutes Played by On Loan U21 Scottish Players |
| Alloa Athletic | 12.9% |
| Annan Athletic | 7.1% |
| Cove Rangers | 0.0% |
| Falkirk FC | 1.2% |
| Edinburgh City | 11.4% |
| Hamilton Accies | 0.0% |
| Kelty Hearts | 18.2% |
| Montrose FC | 6.1% |
| Queen of the South | 15.7% |
| Stirling Albion FC | 4.1% |
| League Average | 7.7% |

## League 2: Minutes Played By On Loan U21 Scottish Players

| League 2 - Scottish U21 Players - On Loan | | |
|---|---|---|
| Club | Minutes Played by On Loan U21 Scottish Players | Equivalent 90-Minute Games |
| Bonyrigg Rose Athletic | 500 | 6 |
| Clyde | 3,970 | 44 |
| Dumbarton | 2,240 | 25 |
| East Fife | 651 | 7 |
| Elgin City | 7,194 | 80 |
| Forfar Athletic | 1,830 | 20 |
| Peterhead | 565 | 6 |
| Stenhousemuir | 35 | 0 |
| Stanraer | 2,972 | 33 |
| The Spartans | 1,082 | 12 |
| TOTALS | 21,039 | 234 |
| League Average | 2,104 | 23 |

## League 2: Minutes Played by On Loan U21 Scottish Players

| League 2 - U21 Scottish Players - On Loan | |
|---|---|
| Club | % of Minutes Played by On Loan U21 Scottish Players |
| Bonyrigg Rose Athletic | 1.5% |
| Clyde | 12.2% |
| Dumbarton | 6.9% |
| East Fife | 2.0% |
| Elgin City | 22.0% |
| Forfar Athletic | 5.6% |
| Peterhead | 1.7% |
| Stenhousemuir | 0.1% |
| Stanraer | 9.1% |
| The Spartans | 3.3% |
| League Average | 6.4% |

# Data

The following spreadsheets were created for this project.

- Scottish Premiership Data – Scottish Players
- Scottish Premiership Data – Scottish U21 Players
- Scottish Premiership Data – Scottish U21 Players – On Loan

- Scottish Championship Data – Scottish Players
- Scottish Championship Data – Scottish U21 Players
- Scottish Championship Data – Scottish U21 Players – On Loan

- Scottish Leagues 1 & 2 Data