**Suspense criteria FIFA**

* If year <= 1992 (2 points win system)
  + Lagging[[1]](#endnote-1) team is losing by just one goal or drawing; it is just one or zero point from the leading team, only one goal behind the leading team, and **has scored the same or higher number of goals.** One goal will place the lagging team in front.
  + Lagging team is **losing by more than one goal but with the same points** as leading team (points\_diff == 0), one goal down (goals\_diff == -1) and higher number of goals scored (goals scored)
  + Lagging team is winning (last game points == 2), while the leading team is either drawing or losing (last game points == 0 or 1) potentially dropping points and seeing their goal difference decrease and they are not facing each other (h2h == 0)
    - Leading team is drawing (last game points == 1) with only one point difference (pts diff == -1)
      * Leading team can drop one point and incur in a lower goal difference (gls diff >= 0)
      * Leading team can drop one points, be level on goal difference (gls diff == -1), but with a lower number of goals scored (goals scored lagging > = goals scored leading)
    - Leading team is losing (last game points == 0) with same points (pts diff == 0)
      * Leading team can incur in a lower goal difference (gls diff >= 0)
      * Leading team can be level on goal difference (gls diff == -1), but with a lower number of goals scored (goals scored lagging > = goals scored leading)
  + **H2H**
    - **From drawing to winning or losing to drawing**
      * If leading and lagging are drawing or lagging team is losing (last\_game\_goals\_diff == 0 or -1) and difference in points is higher than -2.
      * If leading and lagging are drawing or lagging team is losing (last\_game\_goals\_diff == 0 or -1) and difference in points is equal to -2, but lagging team has scored more goals than losing team.
* If year > 1992 (3 points win system)
  + **Minute 0**
    - **Case 1:** lagging team (3rd or 4th) is just two points behind and one or less goals behind the leading team (first if # Immediate opening goal causes shift)
      * **What if** the lagging team goes tied in points and goals difference with the leading team?
        + Goals difference -1 and points difference -2: head-to-head (**#5 and #6** update\_suspense function)
        + Goals difference -1 and points difference -1: lagging team can replace leading team 🡪 suspense 1 (second if # Immediate opening goal causes shift)
  + **Winning scenarios** 
    - Lagging team is winning (last game points == 3), while leading team is drawing (last game point == 1) with only one point difference (pts diff == -1) and they are not facing each other (h2h == 0)
      * Leading team can drop one point and incur in a lower goal difference (gls diff >= 0)
      * Leading team can drop one point, be level on goal difference (gls diff == -1) but with a lower number of goals scored (goals scored lagging > = goals scored leading)
    - Lagging team is wining (last game points == 3), while leafing team is losing (last game points == 0) with same points (pts diff == 0)
      * Leading team can incur in a lower goal difference (gls diff >= 0)
      * Leading team can be level on goal difference (gls diff == -1), but with a lower number of goals scored (goals scored lagging > = goals scored leading)
  + **Drawing scenarios**
    - Lagging team is two points down (pts\_diff == -2), drawing (last\_game\_points == 1)
      * If goals difference is equal or higher than zero, lagging team can replace leading team
      * If goals difference is just one lower than the one of the leading team and the number of goals scored is equal or greater than the one of the leading team, lagging team can replace leading team
  + **Losing scenarios**
    - Lagging team is one points down (pts\_diff == -1), losing by one goal (last\_game\_goals\_diff == -1)
      * If goals difference is equal or higher than zero, lagging team can replace leading team
      * If goals difference is just one lower than the one of the leading team and the number of goals scored is equal or greater than the one of the leading team, lagging team can replace leading team
    - lagging team is losing by more than one goal but with the same points as leading team (points\_diff == 0), one goal down (goals\_diff == -1) and higher number of goals scored (goals scored)
  + **H2H**
    - **From drawing to winning** 
      * If leading and lagging are drawing (last\_game\_goals\_diff ==0) and difference in points is higher than -4.
      * if leading and lagging are drawing (last\_game\_goals\_diff == 0) and difference in points is equal to -4, but lagging team has scored more goals than losing team.
    - **From losing to drawing** 
      * If lagging team is losing (last\_game\_goals\_diff ==-1) and difference in points is higher than -3.
      * If lagging team is losing (last\_game\_goals\_diff == -1) and difference in points is equal to -3, but lagging team has scored more goals than losing team.
* **Tied scenarios**
  + Lagging team is losing **(#1 and #2** update\_suspense function)
    - Lagging team is losing by one point (last\_game\_goals\_diff == -1), leading team is just one point and goal ahead (pts\_diff and gls\_diff == -1), lagging team has scored only one goal less than leading team (goals scored lagging team == goals scored leading team -1), all minute except minute 0 (goal\_minute != 0): **head-to-head**
  + Lagging team is drawing **(#3 and #4** update\_suspense function)
    - Lagging team is drawing (last\_game\_points == 1), leading team is just two points and goal ahead (pts\_diff == -2 and gls\_diff == -1), lagging team has scored only one goal less than leading team (goals scored lagging team == goals scored leading team -1), all minute except minute 0 (goal\_minute != 0): **head-to-head**
  + update\_suspense\_draw\_lots function
    - Before 1994, 2-points system
      * Lagging team is losing by one goal or drawing (lasta game goals diff >= -1 and last game points != 2) and lagging and leading teams are playing against each other (h2h==1) with two points and two goals difference (pts and gls diff == -2). In this case lagging and leading teams would be level in every regard and their qualification is determined by a **drawing of lots. Suspense takes value 1**.
    - From 1994, 3-points system
      * From losing to drawing
        + Lagging team is losing by one goal (last game goals difference == -1) and lagging and leading teams are playing against each other (h2h == 1) with three points and two goals difference (pts diff == -3 and gls diff == -2). In this case lagging and leading teams would be level in every regard and their qualification is determined by a drawing of lots**.** Suspense takes value 1.
      * From drawing to winning
        + Lagging team is drawing (last game points == 1) and lagging and leading teams are playing against each other (h2h == 1) with three points and two goals difference (pts diff == -3 and gls diff == -2). In this case lagging and leading teams would be level in every regard and their qualification is determined by a drawing of lots**.** Suspense takes value 1.

**Suspense criteria UEFA**

* **If H2H == 1**
  + **From losing to drawing**
    - lagging team two pts behind (pts diff == -2) and it is losing by one goal (last game goals diff == -1)
      * if gls diff >= 0 🡪 suspense 1
      * if gls diff == -1 and gls scored lagging >= gls scored leading -1 🡪 suspense 1
    - lagging team less than two pts behind (pts diff >-2) and last game goals diff == -1
  + **From drawing to winning**
    - Before 1994
      * lagging team two pts behind or less (pts diff >= -2) and it is drawing (last game == 0) 🡪 suspense 1
    - After 1994
      * Lagging team one pts behind (pts diff == -3) and it is drawing (last game == 0) 🡪 suspense 1
* **If H2H == 0**
  + If pts diff == 0 and lagging is drawing or losing by one goal (last game goals difference == -1 or 0)
  + **From losing to losing or winning to winning**
    - If leading and lagging teams are level on points (pts\_diff == 0) and lagging\_won == 0 (i.e, tied head-to-head) and lagging is losing by more than one goal (last game goals difference <= -2) or winning (last game points == 2 or 3)
      * gls\_diff >= 0 🡪 suspense 1
      * if gls diff == -1 and gls scored lagging >= gls scored leading -1 🡪 suspense 1
    - If points and goals difference are zero (pts diff and gls diff == 0) and lagging\_won == 0. Any goal of the lagging team will increase its points or goals and make it take over the leading team 🡪 suspense 1.
  + **From losing to drawing**
    - Lagging team one pts behind (pts diff == -1) and it is losing by one point (last game goals diff == -1)
      * If lagging\_ won == 1 🡪 suspense 1
      * If lagging\_won == -1🡪 suspense 0
      * If lagging\_won == 0 🡪
        + if gls diff >= 0 🡪 suspense 1
        + if gls diff == -1 and gls scored lagging >= gls scored leading -1 🡪 suspense 1
  + **From drawing to winning** 
    - Before 1994
      * Lagging team one pts behind (pts diff == -1) and it is drawing (last game == 1) or goal minute == 0 and last game points == 0
        + If lagging\_ won == 1 🡪 suspense 1
        + If lagging\_won == -1🡪 suspense 0
        + If lagging\_won == 0 🡪

if gls diff >= 0 🡪 suspense 1

if gls diff == -1 and gls scored lagging >= gls scored leading -1 🡪 suspense 1

* + - After 1994
      * Lagging team one pts behind (pts diff == -2) and it is drawing (last game == 1)
        + If lagging\_ won == 1 🡪 suspense 1
        + If lagging\_won == -1🡪 suspense 0
        + If lagging\_won == 0 🡪

if gls diff >= 0 🡪 suspense 1

if gls diff == -2 and gls scored lagging >= gls scored leading -1 🡪 suspense 1

* + - * if pts diff >= -1 (lagging maximum one point behind) and lagging drawing (last game goals difference == 0) 🡪 suspense 1
  + leading from winning to drawing
    - if year > 1992, leading is winning (last game points == 3), lagging only one points behind (pts diff == -1) 🡪suspense 1

1. Lagging team can be 3rd or 4th placed, leading can be 2nd or 3rd. [↑](#endnote-ref-1)