Determinants of Soccer Players' Market Values - Italy*

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1 Motivation

1. For what purpose was the dataset created?

To analyze determinants of soccer players' market values, focusing on the Serie A. The goal is to enable robust insights for scouting, player valuation, and transfer market analysis.

2. Who created the dataset and on behalf of which entity?

The dataset was created by John Zhang as part of research into player market valuations.

3. Who funded the creation of the dataset?

The funding details are TBD.

4. Any other comments?

The dataset incorporates data from Transfermarkt, Stathead, FIFA, and Football-database.

2 Composition

1. What do the instances that comprise the dataset represent?

Each instance represents a Serie A player and their associated attributes, including market value, performance metrics, and contextual variables.

^{*}Code and data are available at: https://github.com/Clearsky21z/Player_Market_Value_Analysis

2. How many instances are there in total?

The dataset contains 441 player records.

3. Is the dataset a sample or does it contain all possible instances?

The dataset is a comprehensive sample of Serie A players for the 2023/24 season.

4. What data does each instance consist of?

Each instance includes variables such as player name, age, position, market value, club and national team rankings, goals, assists, and minutes played.

5. Is there a label or target associated with each instance?

The target variable is market value.

6. Is any information missing from individual instances?

No, the dataset is complete.

7. Are relationships between individual instances made explicit?

No explicit relationships are included.

8. Are there recommended data splits?

No, but splits for training and validation can be derived.

9. Are there any errors, sources of noise, or redundancies?

None identified.

10. Is the dataset self-contained?

Yes, the dataset is self-contained and integrates data from multiple reliable sources.

11. Does the dataset contain confidential data?

No confidential data is included.

12. Does the dataset contain offensive or sensitive content?

No offensive or sensitive content is included.

13. Does the dataset identify any sub-populations?

Sub-populations are identified by player positions.

14. Is it possible to identify individuals directly or indirectly?

Yes, players are identified by name.

15. Does the dataset contain sensitive data?

No sensitive data is included.

16. Any other comments?

None.

3 Collection Process

1. How was the data acquired?

The data was scraped and collected from Transfermarkt, Stathead, FIFA, and Football-database.

2. What mechanisms or procedures were used to collect the data?

A combination of web scraping and manual curation was used, scripts are available in the linked repository.

3. What was the sampling strategy?

Players were sampled based on their inclusion in the Serie A for the 2023/24 season.

4. Who was involved in the data collection process?

Employees for Transfermarkt, Stathead, FIFA, and Footballdatabase.

5. Over what timeframe was the data collected?

Data was collected during and after the 2023/24 Serie A season.

6. Were ethical review processes conducted?

TBD.

7. Did you collect the data from the individuals directly or from third parties? Data was collected from third-party platforms.

8. Were the individuals notified about the data collection?

No notification was necessary as all data is publicly available.

9. Did the individuals consent to data collection?

Consent is not required for publicly available data.

10. Was consent revocable?

Not applicable.

11. Was a data protection impact analysis conducted?

TBD.

12. Any other comments?

None.

4 Preprocessing/Cleaning/Labeling

1. Was preprocessing done?

Yes, the data underwent rigorous cleaning to ensure consistency and reliability.

2. Was the raw data saved?

Yes, raw data was retained for future reference.

3. Is the preprocessing software available?

Yes, preprocessing scripts are available in the linked repository.

4. Any other comments? None.

5 Uses

- 1. Has the dataset been used for any tasks already?

 Yes, it was used in regression modeling to analyze market value determinants.
- 2. Is there a repository linking papers or systems using this dataset? GitHub Repository
- 3. What (other) tasks could the dataset be used for? Player scouting, valuation modeling, and market analysis.
- 4. Does the dataset composition impact future uses? No significant limitations identified.
- 5. Are there tasks for which the dataset should not be used? The dataset should not be used for non-sports-related analyses.
- 6. Any other comments?
 None.

6 Distribution

1. Will the dataset be distributed to third parties? Yes, under an open-access license.

2. How will the dataset be distributed? Via GitHub and linked repositories.

3. When will the dataset be distributed? It is already available.

4. Will the dataset be distributed under a license? Yes, an open-access license.

5. Have third parties imposed restrictions? No.

6. Do export controls or other regulations apply? N_{O}

7. **Any other comments?** None.

7 Maintenance

- 1. Who will support/host/maintain the dataset? John Zhang and his potential research team.
- 2. How can the owner/curator/manager of the dataset be contacted? Contact details available in the linked GitHub repository.
- 3. Is there an erratum?

Not at this time.

4. Will the dataset be updated?

Future updates will include subsequent seasons.

- 5. Are there retention limits? None.
- 6. Will older versions of the dataset be supported? Yes, older versions will remain accessible.
- 7. Is there a mechanism for extensions or contributions? Contributions are welcome via GitHub.

8.	Any other comments:
	None.

7.0.1 References

Please refer to the paper and repository linked above for further information.