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Highly dilutive or large rights issue consultation – September 2014

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Summary of Proposal

- Following several clients' queries and complains regarding the replicability of the highly dilutive rights issues such as for Banca Monte Di Paschi's rights issue (ex on June 9, 2014), MSCI announced on June 11, 2014 its intention to launch a consultation regarding the treatment of highly dilutive rights issues in the MSCI Indexes.
- MSCI defines Highly Dilutive or Large Impact Rights Issue as an event having a significant impact on the company capitalization.
- For Highly Dilutive or Large Impact Rights Issue, MSCI proposes:
 - to apply a Price Adjustment Factor (PAF) on the ex-date using the value of Rights
 - **to add the Rights and the Subscription Cash** to the MSCI Indexes
 - to change the Number Of Shares (NOS) as of the close of **Pay-date**.
- This proposal aims to enhance index replicability in cases of Highly Dilutive or Large Impact Rights Issue and reduce tracking error by applying a more accurate PAF and by changing the NOS only at the Pay-date.

Please note that this proposal would not affect the current treatment of non highly dilutive, non large impact or non-attractive rights issues.

Please note that these proposals may or may not lead to any changes to the MSCI indexes.

Defining highly dilutive terms and large impact rights issues*

MSCI proposes to define:

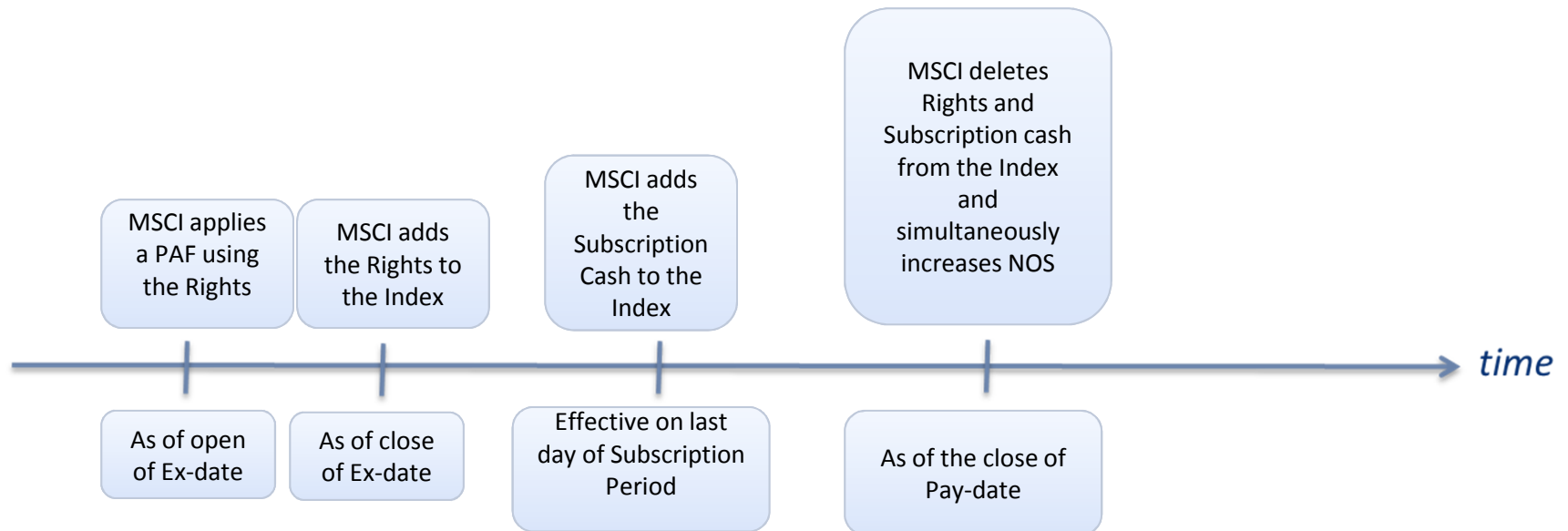
- Rights issues with terms more than 5 per 1 as highly dilutive
- Large impact rights issues as those:
 - Triggering an upwards migrations as a result of a size-segment review
 - With impact on free float-adjusted Market Capitalization of more than USD 5 billion for DM and USD 2.5 billion for EM for Standard Indexes
 - With impact on free float-adjusted Market Capitalization of more than USD 3 billion for DM and USD 1.5 billion for EM for Small Cap Indexes

*Please refer to Appendix III for more details

Proposal*

- Apply a Price Adjustment Factor (PAF) on Ex-date using the value of Right on Ex-date (market value if Right is trading else intrinsic value).
- Add Right to the Index as of the close of Ex date using market value if the Right is trading else using Intrinsic Value.
- Add Subscription Cash to the Index effective on the last day of subscription period.
- Delete Right and Subscription Cash from the Index as of the close of Pay-date**.
- Increase NOS as of the close of Pay-date. Migration upward, if any, will be done simultaneously.

Proposed Event implementation timeline



*For more details on the proposal, timeline of treatment, rights valuation, calculation of the subscription cash, please refer to Appendices I & II.

**MSCI defines the Pay-date as the first trading day of the new shares resulting from the rights issue.

MSCI Current Methodology versus Proposal

Implementation date	MSCI current Methodology	Proposal for Highly dilutive or large rights issue
On Ex-date	Apply a PAF using the terms of the event	Apply a PAF using the Rights (market value or Intrinsic Value)
As of close of Ex-date	Increase NOS	Add Rights to the Index
From open of last day of subscription period	N/A	Add Subscription Cash to the Index
As of close of Pay-date	N/A	<ol style="list-style-type: none"> 1) Delete Rights and Subscription Cash from the Index 2) Increase NOS + migration, if any

Rationale

- The current methodology for Rights issue could cause some replicability issues in some cases and more specifically in cases of highly dilutive terms as the entire capital increase is currently done by MSCI as of close of the Ex-date.
 - The security may be suspended from trading on the Ex-date or for a major part of the trading session, leaving too little or no time for clients to buy a large amount of shares on the Ex-date. Thus, investors replicating the event may have a tracking error.
- The new approach intends to reflect more closely what is happening in the market when the subscription price is below the market price
 - The Right added and subscription cash raised would also be reflected by the Index.
- Implementing the changes in the NOS as of the close of the Pay-date should more accurately represent what is happening in the portfolio of an investor participating in the Rights offer.
 - The change in the weight of the company is reflected once cash should be raised to subscribe to new shares which should be effective last day of subscription period.
- The PAF using the Rights value to adjust for the price on the Ex-date should more accurately reflect the distribution of the Rights.
 - When price on Ex-date moves out of line and is generally much higher compared to theoretical ex price, this results in large PAFs applied on Ex-date. Therefore, the weight of the security is increased in the Index beyond what is expected. Thereafter, the price drops to a level near the theoretical ex price after a few days.

*A recent example being the Rights issue of BANCA MONTE PASCHI ORD, a Mid Cap constituent of the Italy Standard Index.**

*Refer to Appendix IV for more details on rights issue of BANCA MONTE PASCHI ORD

Questions on the proposal

■ Questions on the proposal:

- Do you agree with the proposal? Is a change in treatment necessary in order to cater for the replicability issues encountered for these specific Rights issues?
- Is the definition of Rights issues with highly dilutive terms or large impact (as defined on slide 5) appropriate?
- How should the Right be valued when it is not trading on the market or when it stops trading?*
- Should the proposed treatment be used only for Rights issues with highly dilutive terms or large impact (as defined on slide 5) or for all Rights issues?
- What are the issues, if any, if Rights are added to the Index? Any operational problem in the valuation of a portfolio?

*Refer to Appendix III for calculation of Intrinsic value of right

Questions to seek feedback

- **Replicability:**
 - If you would replicate Rights issue differently than the proposed treatment, what method would you use to replicate the Rights issue?
 - What are the views on treatment of Rights issue as per current methodology? How is replication done as per MSCI current implementation for rights issues?
- **Migrations due to rights issues:**
 - Should migration between size-segments of a security due to a large Rights issue be implemented as of close of Ex-date or as of close of Pay-date or postponed to next Index Review?
- **Restrictions on rights issues:**
 - Certain Rights issue are not open to investors from specific countries (e.g.: often Rights issue in Europe are not open to US investors). How are such Rights issues replicated?
- **Other:**
 - Are there any points not mentioned in this document that you would like to raise concerning Rights issue?

Appendix:

- I. Detailed implementation for proposed treatment
- II. Banca Monte Di Paschi - Summary
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Appendix I: Detailed Implementation for Proposed Treatment

▪ Ex Date

- Apply a Price Adjustment Factor (PAF) on ex date using the value of Right on Ex-date.*

$$\text{PAF} = [\text{P}(t) + \text{Right per Share P}(t)] / [\text{P}(t)]$$

- Right will be valued at market value if it is trading else it will be valued at derived Intrinsic Value if it is not trading.

$$\text{Intrinsic Value of Right} = [(\text{P}(t) * \text{Shares Issued} - \text{Issue P} * \text{Shares Issued})] / [\text{Shares Before}]$$

- Add Right to the Index as of the close of Ex-date (effective next day), if subscription price is lower than the market price of the security. Right is added to Index at market value if the right traded on the Ex-date else at intrinsic value if the right did not trade on the Ex-date.
- Right will not be added to Index if the subscription price is equal to or above the market price at the time of confirming the event even though the Rights issue is fully underwritten. The changes in NOS and FIF, if any, will be postponed to the Pay-date.

▪ Ex Date + 1

- Price Adjustment Factor (PAF) is removed and no longer a part of Index.
- Right is now a part of Index.
- The value of the Right will not be a constant value and will be based on market value of the Right if it is trading else at derived Intrinsic Value if the right is not trading. Right will be kept in Index until Pay-date.

* The PAF may be adjusted based other factors such as dividend entitlement for new shares and other asset attached trading on ex date.

Appendix I: Detailed Implementation for Proposed Treatment (Continued)

▪ Last Day of Subscription Period for Rights

Subscription Cash line is added to the Index effective open of last day of subscription period for Rights (as of close of last day of subscription period - 1) if the subscription price is below the market price. The value of subscription cash will be a Fixed value. It will be kept in Index until Pay-date.

$$\text{Subscription Cash} = [\text{Shares Issued} / \text{Shares Before}] * [\text{Issue Price}] * [\text{Pre Event Number of Shares}]$$

If the subscription price is equal to or above the market price, Subscription Cash will not be added to Index and MSCI will wait for results of Rights issue to implement the increase in NOS, if any.

→ **Thus, entire capital increase due to rights issue with highly dilutive terms and large Rights issue is postponed from Ex-date to last day - 1 of subscription period for Rights issue.**

▪ Pay Date

- The Rights will be deleted from the Index as of the close of Pay-date (effective next day). The deletion price will be market value of the Right if it is trading else deletion price will be derived Intrinsic Value.
- Subscription Cash line will be deleted from the Index as of the close of Pay-date (effective next day).
- New shares resulting from rights issue will be added to the Index as of the close of Pay-date (effective next day).
- Migration upwards, if any, implemented as of the close of the Pay-date (effective next day). Migrations are triggered when change in Full Market Capitalization of company is 50% or more which is deemed as a large impact on company market capitalization. In addition, the proposal to postpone migrations due to Rights issue from Ex-date to Pay-date provides sufficient time for clients to reflect the addition to the Standard Indexes.

▪ Pay Date + 1

- Right and Subscription Cash are removed and are no longer part of Index
- New shares are added and are now part of the Index.

Appendix II: BANCA MONTE DI PASCHI - Summary

- Rights 214 new shares for every 5 shares held at a subscription price of EUR 1.
- Ex-date: June 9, 2014
- Subscription period from June 9, 2014 till June 27, 2014
- Pay-date July 10, 2014
- Global Standard Indexes (Mid Cap segment)
- Country: Italy
- Rights trading from June 9, 2014 till June 20, 2014.
- Initial Security Weight = 0.913%
- $P(t-1) = 24.64$ EUR
- $P(t) = 1.848$ EUR
- Rights $P(t)$ on ex date = 21.5 EUR

Appendix III: BANCA MONTE DI PASCHI – treatment under current methodology and proposal

	Illustration – PAF using the terms	Implementation done by MSCI - PAF using the rights value (**)	MSCI proposal
PAF formula	If Issue P is < P(t) then $[(P(t) \times (\text{Shares Before} + \text{Shares Issued}) - \text{Shares Issued} \times \text{Issue P}) / \text{Shares Before}] / [P(t)]$ else PAF = 1	If Issue P is < P(t) then $((P(t) + \text{Rights P}(t)) / P(t)) / P(t)$ else PAF =1	If Issue P is < P(t) then $((P(t) + \text{Rights P}(t)) / P(t)) / P(t)$ else PAF =1
PAF value	20.639	12.634	12.634
NOS increase timing	as of close of ex-date	as of close of ex-date	as of close of pay date
NOS increase	5,116,514,389	5,116,514,389	5,116,514,389
Add Rights	n/a	n/a	Yes
Timing of rights addition	n/a	n/a	Ex-date + 1
Add Subscription cash	n/a	n/a	Yes
Timing of Subscription cash addition	n/a	n/a	last day of subscription for rights
Country Index performance on ex-date (*)	0.5001%	-0.0479%	-0.0479%
Cumulative Country Index performance from ex date till pay date (*)	-0.3096%	-0.8532%	-0.3185%

(*) assuming a zero performance for the rest of the country index

(**) exceptional PAF treatment as applied by MSCI on June 9, 2014.

Appendix IV: Indicative list of historical rights issues qualifying to be implemented under the proposal*

Country Code	Index family	Ex Date	MSCI Security Code	Security Name	Terms	Impact in USD
IT	Small	16-Jul-12	12562.01	FONDIARIA - SAI ORD	R 252 : 1 @ EUR 1	1,371,320,104
IT	Small	16-Jul-12	13117.03	UNIPOL GRUPPO FINAN ORD	R 20 : 1 @ EUR 2	894,866,780
IT	Small	16-Jul-12	13117.01	UNIPOL GRUPPO FINAN PRIV	R 20 : 1 @ EUR 0.975	421,942,987
GB	Small to Mid	17-Jul-12	32883.01	MELROSE	R 2 : 1 @ GBP 1.42	1,714,133,968
ES	Mid	30-Apr-13	69016.01	BANKIA	R 397 : 1 @ EUR 1.352663	18,678,783,610
GR	Small	11-Jun-13	22868.01	BANK OF PIRAEUS	R 35.680197 : 1 @ EUR 1.7	7,569,882,555
GB	Large	18-Sep-13	10326.01	BARCLAYS	R 1 : 4 @ GBP 1.85	9,845,550,724
CH	Small	1-Oct-13	29841.01	SCHMOLZ + BICKENBACH	R 7 : 1 @ CHF 0.53	408,452,146
IT	Small to Mid	31-Mar-14	36948.01	BANCO POPOLARE	R 17 : 18 @ EUR 9	3,081,816,312
BR	Small to Mid	6-Jun-14	31001.01	B2W	R 59.874514 : 100 @ BRL 25	736,393,739
DE	Large	6-Jun-14	10862.02	DEUTSCHE BANK NAMEN	R 5 : 18 @ EUR 22.5	9,418,895,300
IT	Large	9-Jun-14	23292.01	BANCA MONTE PASCHI ORD	R 214 : 5 @ EUR 1	7,597,150,446
PT	Small to Mid	1-Jul-14	15361.02	BCP BANCO COMERCIAL	R 7 : 4 @ EUR 0.065	3,430,266,719

* The list is only indicative and not exhaustive

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