Comments on Securities and Exchange Board of India (SEBI)'s discussion paper on "Review of framework for public issuance of Convertible Securities"

National Institute of Public Finance and Policy ${\it Macro/Finance~Group}$

December 28, 2015

Contents

1 Table of Recommendations		
Appendix A	Note on Convertible Securities	4
Appendix B	Treatment of Convertible Securities	9

1 Table of Recommendations

Pertains	Agree	Proposed changes	Rationale
to	$/\mathbf{dis}$ -	/suggestions	
para-	agree		
graph			
3-6	N/A	The regulatory framework for issuance of securities must be agnostic to the nature of the security, so far as it relates to the terms and conditions of such securities. The framework may, however, prescribe different disclosure standards for convertible securities. The current framework largely treats equity and convertible securities at par subject to certain exceptions relating to the tenure of convertible securities issued in specific circumstances. This treatment should be continued, subject to the exception that requirements related to the tenure of convertible securities must be dispensed with.	1. Market failure may arise due to information asymmetry: In the case of convertible securities, market failures can arise only out of information asymmetry. The intervention must, therefore, be limited to mandating certain disclosure standards to the issuers of convertible securities. 2. Market participants may determine the terms and conditions: The terms and conditions of issuance of convertible securities are best left to the judgment of the issuers and subscribers. 3. International practice: Regulatory frameworks of mature financial jurisdictions (including EU, UK and Korea) do not treat convertible securities as a special class of securities and apply different rules to them. Such regulatory frameworks do not dictate the terms and conditions for their issuance or conversion.

7 (a)	N/A	Present Position: Regulation 28(2) of the ICDR Regulations, 2009 provides flexibility to the issuer in determining the pricing. The modalities of pricing should at best be left to the choice of the issuer. The current framework provides the flexibility to the issuer, hence this should continue.	Regulator must address market failure arising due to information asymmetry: As discussed in Section 3.1, the only possible market failure, in the case of issuance of convertible securities, can arise due to information asymmetry. This can be addressed by mandating high reporting standards. There is no market failure in pricing of convertible securities, hence, the price discovery mechanism should be left to market forces.
7 (b)	N/A	Holders of convertible securities must be allowed to make an offer for sale of such securities on the same conditions as holders of equity shares are allowed.	Free transferability of securities is important to allow holders of such securities to reap the benefits of their investments. There is no reason for restricting holders of convertible securities from doing the same.
7 (c)	N/A	Convertible securities must not be treated as debt securities, since their price depends on the price of the equity shares into which they may be converted.	A convertible security can be considered as a bundle of a bond and a warrant. Warrants are options which are issued by the company. When (if) the option is exercised, the company creates new shares. So a warrant is slightly different from a simple call option, since a call option is exercised on the promoter while a warrant is exercised on the company. Appendix B shows that the price of the convertible security is dependent on the price of the warrant, which in turn is dependant on the price of the underlying shares. This brings a convertible security closer to equity than debt.

A Note on Convertible Securities

A.1 Introduction

SEBI has introduced a discussion paper seeking suggestions on the regulatory framework for treatment of convertible securities.

This note contains our feedback on the discussion paper. The note is divided into two parts -

- 1. Section 2 of the note contains an Executive Summary of our feedback.
- 2. Section 3 of the note explains the rationale for each item of the feedback.

A.2 Executive Summary

- 1. The regulatory framework for issuance of securities must be agnostic to the nature of the security, so far as it relates to the terms and conditions of such securities. The framework may, however, prescribe different disclosure standards for convertible securities.
- 2. Convertible securities must not be treated as debt securities, since their price is sensitive to the price of the equity shares into which they may be converted.
- 3. The price discovery mechanisms applicable to the issuance of equity shares must be applicable to the issuance of convertible securities.
- 4. Holders of convertible securities must be allowed to make an offer for sale of such securities on the same conditions as holders of equity shares are so allowed.

A.3 Recommendations and rationale

A.3.1 General principle

Recommendations

The regulatory framework for issuance of securities must be agnostic to the nature of the security, so far as it relates to the terms and conditions of

such securities. The framework may, however, prescribe different disclosure standards for convertible securities.

The current framework largely treats equity and convertible securities at par subject to certain exceptions relating to the tenure of convertible securities issued in specific circumstances.¹ This treatment should be continued, subject to the exception that requirements related to the tenure of convertible securities must be dispensed with.

Rationale

- 1. Market failure may arise due to information asymmetry: The general rule in public economics is that markets work well in the absence of State intervention. State intervention should, therefore, be limited to circumstances in which the market does not work well. These circumstances are referred to as market failures. Market failures which necessitate State intervention are:
 - (a) Information asymmetries between market participants;
 - (b) Concentrated market power;
 - (c) Externalities resulting from market practices;
 - (d) Public goods.

In the case of issuance of convertible securities information asymmetry may arise between -

- (a) the issuers and the subscribers: Where the terms and conditions of the convertible securities are unclear.
- (b) the issuer and the shareholders: Where the shareholders are not clear of the extent to which they will be diluted as a result of conversion of the convertible securities.

Apart from information asymmetry, the other market failures, namely, concentrated market power, externalities and public goods, do not arise in the case of convertible securities. The intervention must, therefore,

¹Regulations 23 and 75 restrict the tenure of convertible instruments to 18 months where the proceeds of such instruments are to be used for financing of group companies or where the securities are issued through a preferential allotment. Regulation 90 restricts the tenure of such instruments to 60 months in case of qualified institutional placements.

be limited to mandating certain disclosure standards to the issuers of convertible securities.²

- 2. Market participants may determine the terms and conditions: The terms and conditions of issuance of convertible securities are best left to the judgment of the issuers and subscribers.
- 3. International practice: Regulatory frameworks of mature financial jurisdictions (including EU, UK and Korea) do not treat convertible securities as a special class of securities and apply different rules to them. Such regulatory frameworks do not dictate the terms and conditions for their issuance or conversion.

A.3.2 Pricing of convertible securities

Question

Should the price of such convertible securities be pre-fixed or market linked? Alternately, should the price be fixed based on bids received under the book building methodology?

Recommendation

Present Position:

Regulation 28(2) of the ICDR Regulations, 2009 provides flexibility to the issuer in determining the pricing. The Regulation states:

An issuer may determine the coupon rate and conversion price of convertible debt instruments in consultation with the lead merchant banker or through the book building process.

The modalities of pricing should at best be left to the choice of the issuer. The current framework provides the flexibility to the issuer, hence this should continue.

²To clarify, the provisions regarding creation of a debenture redemption reserve and appointment of a debenture trustee, are applicable to all secured debentures, whether or not convertible. Hence, this note does not address this issue.

Rationale

Regulator must address market failure arising due to information asymmetry: As discussed in Section 3.1, the only possible market failure, in the case of issuance of convertible securities, can arise due to information asymmetry. This can be addressed by mandating high reporting standards. There is no market failure in pricing of convertible securities, hence, the price discovery mechanism should be left to market forces.

A.3.3 Offer for sale

Question

Should offer for sale of convertible securities be permitted?

Recommendation

Holders of convertible securities must be allowed to make an offer for sale of such securities on the same conditions as holders of equity shares are allowed.

Rationale

Free transferability of securities is important to allow holders of such securities to reap the benefits of their investments. There is no reason for restricting holders of convertible securities from doing the same.

A.3.4 Treatment of convertible securities

Question

Should OCDs and OCPs be treated as debt and be required to comply with Debt Regulations? Or should it be considered as equity and require to comply ICDR Regulations?

Recommendation

Convertible securities must not be treated as debt securities, since their price depends on the price of the equity shares into which they may be converted.

Rationale

A convertible security can be considered as a bundle of a bond and a warrant. Warrants are options which are issued by the company. When (if) the option is exercised, the company creates new shares. So a warrant is slightly different from a simple call option, since a call option is exercised on the promoter while a warrant is exercised on the company. Appendix B shows that the price of the convertible security is dependent on the price of the warrant, which in turn is dependant on the price of the underlying shares. This brings a convertible security closer to equity than debt.

B Treatment of Convertible Securities

B.1 Convertible security

- Convertible security is a bundle of corporate bond and warrant.
- Warrants are options which are issued by the firm.
- In a warrant, **the firm** shorts the option. When (if) the long exercises, new shares are created.
- On exercise, number of outstanding share increases, so a warrant is slightly different from a simple call option.

B.2 Pricing for corporate bond

$$P_t = \sum_{t=1}^n \frac{c}{(1+r)^t} + \frac{F}{(1+r)^n}$$
 (1)

where,

 $P_t = Price of bond$

c = Coupon amount

F = Fixed return at maturity

r = Risk free interest rate

n = Maturity time

B.3 Pricing for warrants

When warrants are exercised number of outstanding share increases, so warrant price after incorporating the dilution effect:

$$W = \frac{N}{N+k}C_w \tag{2}$$

where

W= Value of the warrant

N= No. of share outstanding

k= No. of new shares

 C_w = Value of a call option written on the stock of a firm without warrants C_w is calculated by using Black-Scholes model

If the standard deviation of the return in the company's equity is constant, it leads to the following equation:

$$C_w = SN(d_1) - Xe^{-r(T-t)}N(d_2)$$
(3)

Where

$$d_1 = \frac{\left[\ln\left(\frac{S}{X}\right) + (T-t)\left(r + \frac{1}{2}\sigma^2\right)\right]}{\sigma\sqrt{T-t}}$$

$$d_2 = d_1 - \sigma \sqrt{T - t}$$

S= Spot price

X= Warrant exercise value

r= Risk free interest rate

 σ = Volatility of underlying asset

N(d)= Probability that a standard normal variable will take on a value less than equal to d

therefore,

$$W = \frac{N}{N+k} [SN(d_1) - Xe^{-r(T-t)}N(d_2)]$$
 (4)

B.4 Component model for convertible bond pricing

The convertible is divided into a straight bond component, denoted by B_t , and a call option component, denoted by W

Assumptions:

European call option

Strike price are known

Note: Convertibles have stochastic strike prices as the straight value of the bond (which is the future strike price) depend on the future development of interest rates.

Let, a convertible bond is converted into equity after "n" period.

Therefore, adding equation (1) & (4), we will get convertible bond price

$$C_t = \left[\sum_{t=1}^n \frac{c}{(1+r)^t} + \frac{F}{(1+r)^n}\right] + \frac{N}{N+k} \left[SN(d_1) - Xe^{-r(T-t)}N(d_2)\right]$$
 (5)

Differentiating w.r.t S

$$\frac{dC}{dS} = f(S, ..) \tag{6}$$

Where C_t is convertible bond price at time t

From the above equation, since the relation between convertible bond price and spot price of underlying asset is nonlinear, so we can conclude that change in convertible bond price will depend on the spot price.