INDUSTRIAL CORPORATES

Rating Methodology

Credit ratings inculcate transparency and invite investor confidence. Ratings are a third party opinion on the credibility and financial strength of institutions signifying ability to service debt in a timely manner. Ratings facilitate borrower access to a large and diverse funding pool to provide greater leeway to match the nature of assets being financed. From the lenders point of view, credit ratings can be an additional tool of risk management of their asset portfolios and may well serve as pricing benchmarks.

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JCR-VIS Credit Rating Company Limited (JCR-VIS) conducts local currency credit ratings in which sovereign risks are ignored and the Government of Pakistan is considered risk free i.e. AAA rated. In order to serve the varying needs of the industrial sector, JCR-VIS issues both entity and debt instrument ratings. Entity ratings reflect the capacity of the company to re-pay its unsecured creditors while debt instrument ratings also take into account the structure of that particular debt instrument and its priority in the capital structure which strengthens or weakens its recovery prospects in comparison with the unsecured creditors. Credit ratings of listed debt instruments are mandatory in Pakistan.

The Rating Scale & Horizon

Ratings are opinions on the timely payment of obligations and the rating bands denote the relative risk associated with the ratings. Along the rating spectrum, all ratings of BBB- and above are investment grade. JCR-VIS evaluates credit risk over the medium to long term horizon incorporating an assessment of future events to the extent they are known or can be anticipated, hence, the ratings are prospective in nature. The present and the projected financial health and market position of the institution are analyzed in view of the management's long-term vision and strategy, available resources and industry prospects.

Ratings should be stable or at least predictable over the rating horizon unless the company demonstrates unexpected per-

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formance - either positive or negative. Temporary fluctuations in performance do not warrant a rating action if JCR-VIS does not expect a change in long-term performance.

The lowest rating 'D' stands for default and is the only rating which is based on the historical event when an interest and /or principal payment is due and is not paid. The condition of default is removed on clearance of the dues by any means including rescheduling or write-off by the lenders.

Rating outlooks highlight the potential direction of ratings. An outlook is not necessarily a precursor of a rating change. Rather, the rating outlooks "Stable", "Positive" and "Negative" are used to qualify the potential direction of the rating, given changes in economic and/or business conditions. Stable outlook indicates that the company is performing as expected for the given rating, and no events are currently foreseen that would precipitate a rating change. Positive outlook indicates that the company is performing above expectations set for the given rating while Negative outlook indicates the contrary view. Generally, we expect outlooks to resolve within a period of one year only. It should also be noted that these indicators are concerned only with the perceived change in credit risk involved, if any and should not be confused with expectations of the company's operational performance as a whole.

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The 'Rating Watch' status results from a need to notify entities, creditors and investors that there are conditions present leading to re-evaluation of the current rating(s) which may or may not lead to a rating change. Certain circumstances which may lead to rating watch are mergers and acquisitions, major expansions, regulatory actions and any other significant change in operating environment; the impact of which cannot be assessed due to lack of sufficient information. As there is some uncertainty involved, outlooks are not assigned to ratings on Rating Watch.

We expect the ratings to be more stable in the upper rating bands due to the stronger protection factors present. The performance criteria become stricter as we move up the rating spectrum and the risk profile has to be maintained at significantly lower levels to remain eligible for that rating band. High rated companies may have to sacrifice aggressive growth opportunities to maintain their credit risk profile.

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RATING METHODOLOGY

A host of major factors and sub-factors are examined to reach the overall rating to incorporate all factors in accordance with their importance, weakness in one area may be offset by strengths in another area or the vice versa may also hold true. JCR-VIS analyzes both qualitative and quantitative factors to determine the credit risk of a company. Qualitative factors

include the nature of the industry that the company is operating in, the entry and exit barriers, the competitive profile of the industry and the company's position in it, size, strength and adequacy of operational systems, quality of management and regulatory framework governing the industry.

Quantitative factors include an appraisal of the historic and projected financials to consider the risk entailed by the capital structure, level of profitability, capacity utilization levels, capital expenditure requirements, adequacy of cashflows to meet operational requirements and debt servicing obligations etc. Financial statements may also be recasted to assess the company's performance over a time-line. The projected financials are studied for their reflection of the current and expected economic realities and are also sensitized on different risk scenarios to judge the company's ability to bear operational and financial risk. While review of history is important to judge the company's track record of performance, it is the potential for future performance which drives the ratings.

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Regulatory Framework & Transparency

The regulatory framework governing the industry may place the company at a significant advantage or disadvantage vis-à-vis its competition through tax incidence, price regulations, industry protection, environmental regulations etc. The degree of regulatory support the industry receives is also a function of its contribution to economic growth which will determine its importance to economy and to policy makers. For instance, oil and gas industry is generally supported by the local governments world wide due to its strategic nature.

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The level of transparency in operational systems and in reporting and the reliability of audit practices are given due weight in the ratings to the extent that the information provided by the management reflects the true operational health of the company. The corporate governance is also assessed in light of practices put in place by the management to attain the goals of transparency, accountability and fair play in dealing with the stakeholders. Generally, accounting quality, reliability and breadth of disclosure and corporate governance is greater in public limited companies as compared to private limited companies and is given due weight in the ratings.

Industry Risk Assessment

The business risk of a company to a large extent dictates the degree of financial risk it can afford by affecting the level and predictability of cashflows that it is likely to generate. With the exception of few, industrial ratings are generally constrained by the inherent risks in the industry and we seldom see high (AA category) ratings in industrial sectors.

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Higher and predictable cash flow streams will lower the industry risk. For instance utilities operate with greater stability in demand due to the captive market base which provide strength to the ratings. Some companies may also have mitigated the sectoral risk by way of diversification.

The performance of different industries is affected by trend of various economic variables including GDP, interest and exchange rates and the nature of the industry (cyclical, commodity, value-added).

The other industry factors which are considered include level and patterns of demand growth and elasticity of demand, level of profitability and ability to maintain margins, capital intensive nature and flexibility in the timing of capital outlay and degree of cyclicality. Vulnerability to technological change may also be a greater hazard in certain industries such as software, telecom or airlines. For industries / companies dependent upon foreign markets for input supply or for sales, the timely access and fluctuations in exchange rate pose major risks. The competitive nature of industry is also critical including nature and size of competition versus the size of the market and the entry and exit barriers to competition.

Competitive Positioning & Diversification

The company's product lines and its market share for each determine its ability to govern the market supply and, hence, output prices which may render it an advantage over other market players. Serving niche markets may also be an advantage or disadvantage depending upon the elasticity of demand for the limited target market. The positioning in the value-chain also impacts the stability and strength of cashflows. Generally, there are better margins and greater stability and control over cashflows for companies positioned higher up on the value-chain. Vertical integrations also provide greater leeway to control costs and prices.

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The quality and concentration of trade debtors and the credit terms extended to them are also analyzed for the past track record of payment, diversification to mitigate exposure risk and the impact on the cash cycle of the company. Similarly, the supply and price risk of raw materials is assessed including the availability and nature of market of raw materials including foreign markets, supplier relationships and available substitutes.

The location and number of independent plant facilities reduces the vulnerability of the company to geographical risks which may pertain to demand, or availability of raw materials or labor problems. For instance, geographical dispersion is necessary for any hotel chain to mitigate risk of regional downturns and provide some stability to cashflows through economic and real estate cycles. Similarly, for the sugar

industry factors such as easy availability of sugarcane and recovery rates are important considerations for location.

Diversification in most contexts is looked at favorably as it mitigates business risk to the company. Diversification within the industry including variety in product lines and target markets provides cushion to the revenue base in case demand declines for a particular product or a segment.

Ratings are supported in case of true diversification in business lines where performance is dependent upon unrelated variables. A company is given credit if it operates in diverse industries serving different target markets with no major dominance from any unit. In this case, each line of business is evaluated as an independent unit. With diverse operations, competent and professional management for each line is also an important factor as skills and practices required in running different businesses vary greatly.

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Size is also a key driver of ratings. Larger companies have greater staying power due to their extensive resource base and stronger shields in terms of economies of scale, reserves, broader market access or customer base, large number of products and franchise value which may enable them to better withstand economic downturns. They generally have a greater number of peripheral assets as well to sell off or place as collateral to raise funds. Moreover, it is seen that since lending institutions have larger exposure to these companies, they are more willing to extend support in difficult times and to reschedule and restructure their borrowings or even extend additional funds.

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Smaller companies generally lack the above strengths and additionally have a riskier financial structure particularly in the growth stage which adds to their vulnerability in times of economic or business downturn.

Management & Organization

The credibility of the management is judged by the convergence of the management strategy and established business goals and its performance against objectives. Management is assessed for its operational effectiveness and for its risk tolerance. The stability of the management team and the relevance of their credentials to their tasks are also important considerations.

Organizational structure depicts the overall management philosophy and determines operational efficiency and success. Over-dependence on just a few individuals, absence of succession planning, heavy orientation towards family versus professional management, indistinct management structure, too much interference by the board in the day-to-day operations, absence of delegation etc. become rating constraints.

The formulation of a vision by the top management and its communication to all levels is also a pre-requisite for organization building. Employee awareness of the overall goals and objectives of the company and the short-term and long-term strategy towards achievement of those goals is important for business growth.

Capital Structure & Access to Funds

The financial policy of the management is assessed to determine the degree of flexibility in the capital structure of the company as compared to its business risk. Ordinary shares provide the greatest cushion to creditors, as they do not entail any fixed obligations. Preference shares also have greater flexibility in payments than pure debt instruments as the dividend payments are made out of available profits, although they pose a greater strain on cashflows as compared to ordinary equity.

While the definitions of equity and debt remain standardized, certain adjustments are at times necessary to evaluate the risk associated with the capital structure of the company on the basis of the structure and intent of the instrument. Preference shares may bear greater characteristics of debt if they carry a redeemable option which has high probability of being exercised. Debt instruments may also carry options for conversion into equity, however, such is not accounted for until the event takes place as the interest payments are fixed and payable by the company till conversion.

Any un-provided losses or provisions are also netted off including dead investments or lending with little likelihood of repayment. On the other hand, a company is given the benefit of hidden reserves, if any, in the form of high value assets not reflected on the books.

Leverage translates into higher returns enhancing shareholder's value, however, at the same time, increases the risk level as fixed obligations increase. Leverage is expected to be maintained in certain ranges for different rating categories which characterize the level of credit risk represented by that category. However, there may be exceptions if there are other strengths present which mitigate the risk of higher leverage. An analysis of the source of funding, tenor, and the associated costs with respect to the assets being financed is conducted to assess the re-financing risk of the balance sheet. The level of unencumbered assets to total assets is also considered to determine room for additional leverage.

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JCR-VIS also examines the company's access to funds under stress, including its access to the capital markets as demonstrated historically, its affiliations, banking relationships, presence of peripheral assets which could be

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sold. A company's experience with different financial instruments and debt and capital markets gives it several options in case funds from a particular source dry up for any reason.

Often access to borrowings at favorable terms for weak companies is also achieved through obtaining guarantees from the stronger group companies. On the opposite note, it is entirely possible that the other group companies are weaker and require support from the company being rated. The prospective burden is assessed in light of past instances and future potential including currently outstanding guarantees or commitments on behalf of weaker associated concerns and is accordingly reflected in the ratings.

Profitability & Cash flow Generation

Strong profitability over time, coupled with judicial retention, is able to attract external capital as well as withstand adversarial conditions. Historical trends and the current and expected market situations are examined to project future profitability to form a broad idea of stable, improved or deteriorating profitability position in the intermediate to the long-term.

Sales stabilize and gross margins improve generally as a company moves towards value-addition, develop a differentiated product or a market niche, operate at higher capacity utilization and develop economies of scale. For commodities, there is risk of both price and off take as may be observed in the sugar and cotton spinning sectors. Global supply and demand risk is also evaluated for companies with significant exports or imports.

The capital structure of the company will also affect the profitability through the burden of debt servicing costs. As the risk associated with the capital structure increases, lenders demand greater compensation for their exposure. A rough measure to evaluate the degree of benefit awarded by the level of leverage maintained by the company is ROAE / unleveraged ROAA (adjusted for financial expenses). If the ratio is above 1.0x, then the company is benefiting from leverage while the trend indicates improving or declining level of benefit.

The projected profitability levels are subjected to various stress tests including reduced volumes, unfavorable change in input and output prices, unfavorable change in exchange rates if there is currency risk involved and increased burden of financial costs.

While profitability levels are considered, cashflows assume the paramount importance for credit ratings as debt servicing has to be made out of cash. The company's ability to meet its obligations in a timely manner is a prime consideration for the ratings. The current and projected level of debt and debt servicing requirements with respect to the cashflows generated are examined to determine the projected risk profile of the company.

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The quality of cashflows is judged on the basis of their strength, volatility with business cycles, predictability in course of normal operations and is analyzed at various levels.

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Funds Flow from Operations (FFO): Profit before financial expenses and taxes + adjustment for impact of non-cash items - payment for financial expenses and taxes

Cash Flow from Operations (CFFO): FFO +/- changes in working capital

Free Cash Flow (FCF): CFFO - impact of capital expenditure undertaken and disposal of fixed assets

Discretionary Cash Flow (DCF): FCF - dividends paid during the period

Debt Coverage Ratios: Cashflows (separately at the four levels) / Total Debt

Debt Servicing Coverage Ratios: Cashflows (separately at the four levels) + financial charges paid / (Periodic principal repayment + financial charges paid)

The FFO level reflects the capacity of the cash generated from operations to meet working capital, capital expenditure and debt servicing requirements. The sensitivity of revenues from core operations to business cycles is evaluated to determine the precision of the cash flow forecasts.

CFFO incorporates the impact of stress created by working capital changes. At the level of FCF, companies capability to service both regular and strategic expenditures is considered. Since the assumption is that of a going concern, JCR-VIS evaluates the company's ability to internally generate funds to modernize / maintain its assets as well as to obtain external funds for expansions. An interesting measure to determine adequate level of capital expenditure for modernization is the capital expenditure to depreciation ratio. The dividend paying capacity is evaluated at the level of DCF.

The crux of the cash flow analysis is to determine the ability of the company to produce sufficient funds from operations to meet debt servicing requirements and incur capital expenditure. For higher-grade companies where long-term viability is more assured, there is greater emphasis on the level of cashflows from operations and its relation to the outstanding debt level which will determine the time period required to pay-off the entire debt. Focusing on debt servicing coverage from cash flow becomes more important as we go down the rating spectrum.

High cash flow coverage ratios may not necessarily constitute strength if they are arising from low level of capital expenditure or decline in debt levels which can indicate complacency on the part of the management and shall affect future growth.

A company with stable and predictable cashflows can under-

take a comparatively aggressive capital structure without compromising creditworthiness. For example, the cashflows of the oil and gas exploration industry are dependent upon the quantum of present proven reserves which will go into production, therefore, it continually invests significant capital in exploration activities to build up reserves. However, since a successful hit is not assured, cashflows tend to be volatile and low debt leverage is preferable for the sector. On the other hand, the pharma industry exhibits comparatively stable demand patterns, and hence, stable cashflows, and can afford comparatively higher debt leverage.

A company with stable and predictable cashflows can undertake a comparatively aggressive capital structure without compromising creditworthiness

For industries dependent upon seasonal agricultural crops for production, like the sugar and cotton spinning industry, debt leverage peaks during the production season with seasonal borrowing to finance inventories and then declines. For such industries, the average liquidity position is assessed through the cycle as well as the maximum stress on the financials during the peak production time.

Rating Cyclical Industries

A cyclical company is defined as one whose sales in volume and price, move closely with major macro economic indicators and / or aggregate business activity. Generally, these companies sell non-differentiated products, are price takers in a volatile market and capital intensive with high spending cycles. Examples of cyclical companies in the manufacturing sector are sugar, cotton spinning, automobiles, paper and pulp while non-manufacturing include lodging / hoteling, recreation and airlines.

JCR-VIS rates such industries through the cycle. The maximum down-turn potential in the industry has to be analyzed for how bad the results can be and how well the company is equipped to weather any downturn. When the industry is going through a boom period, the ratings would appear to be depressed while when the industry is going through a trough, the ratings would appear to be optimistic.

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Financial flexibility and liquidity are important considerations as cash can accumulate and be consumed very rapidly in cyclical industries. Generally, the companies in cyclical industries accumulate cash during the boom cycle to provide a buffer during the downturn.

The strength of the cashflows from year to year is hard to determine due to volatility, especially if it is in both input and output prices and volumes, and large capital expenditures spread variably across the cycle. Relative cost position then becomes a competitive strength in the industry as in a downturn the lowest cost producer has the room to cut prices upto his breakeven level to maintain or increase market share which may

result in unsustainable losses for the higher cost producers. For instance, for spinning companies the prices of yarn move in line with the international prices while the prices of raw cotton depend upon domestic production factors. Since increase in raw material prices cannot be passed on to the customer entirely this affects gross margins in which case only the low cost producers with high volumes can perform.

It is also important to understand the management discretion possible in incurring capital expenditure and the timing and level of such capital expenditure. Generally, increase in capacity comes near the peak of the cycle on an industry-wide basis. Also, the capacity increases tend to be large to generate economies of scale.

Since it takes time for the new capacity to come on-line and generate full efficiency, it is hard to predict supply conditions which can result in price swings. Often the capacity increase may hit the trough of the cycle which can further exacerbate supply conditions. Such is also the case with lodging / hotel industry since hotel construction takes time, any additions in capacity including setting up of a new hotel is risky as economic conditions may not be so robust by the time it comes online.

Cyclical industries do not afford high debt levels as they carry high business risks. Hence, a conservative debt profile is viewed favorably as cashflows become significantly stressed in times of low economic activity.

Notching Criteria

Entity ratings are notched up from the stand alone ratings in case of significant explicit external support available to the entity. Notching relationships for debt instruments combine considerations of asset protection and ranking i.e. material advantage or disadvantage of a given debt instrument which may arise due to its positioning in the capital structure of the company, presence of security etc. This leads to differentiation in ratings of specific issues from entity ratings.

While timeliness is the primary issue for investment grade ratings, the potential for ultimate recovery also becomes important for lower grade ratings which have higher probability of default. Therefore, based on similar security ensuring ultimate recovery, the degree of advantage or disadvantage given to a below investment grade rating may be greater as compared to an investment grade rating.

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External Support to Entity

Entity ratings may be enhanced on the basis of the extent of support from sponsors / shareholders, associated companies, etc. JCR-VIS takes into account how integral the company is to the group, the relative financial health of the group and any explicit or implicit support to the company being rated. JCR-VIS seeks to analyze the particular instances in which assistance was

required by the company being rated and the degree of support provided by the sponsors. Evaluation of the financial strength of the group then becomes important to give any benefit in credit ratings including its franchise value, access to funds and diversification element.

Any institution holding an external guarantee will be rated equivalent to the guarantor if the guarantee is explicit and provides full coverage to obligations. However, in other cases where the guarantee is present but timeliness is not ensured, notching down from the guarantor is usually the practice. The ultimate sponsor / guarantor will be the government which is rated risk free or AAA where LCY rating is concerned.

In the event that a company / obligation is supported by two entities carrying independent credit risks, then the support provided is generally superior as compared to the situation in which only the stronger entity was supporting the company being rated. This concept arises from the viewpoint that the probability of both the supporting entities defaulting at the same time is lower than the probability of either one defaulting. Limited benefit of joint support is given to associated / group companies or companies in the same sector to ensure independent risk drivers.

Notching Relationships of Debt Instruments

Debt instruments may be notched up or down based on their recovery prospects vis-à-vis the unsecured creditors. Subordinated debt is notched below the entity rating and the number of notches depends upon the degree of subordination.

Notching up is done on the basis of security determined by the quality of security and degree of coverage provided to principal. Further notching up is also possible through establishing a strong structure which gives significant additional enhancement to the debt recovery prospects. This could be achieved through credit enhancement features such as creation of a reserve or sinking fund, dedicated liquidity support or strong external higher rated guarantors. In the last case, the debt issue rating will be rated equivalent to the guarantors rating if the guarantee is explicit and provides 100% coverage to the obligations. Notching relationships on basis of security, however, do not hold for AA band rated companies with high probability of timely payment. **JCR-VIS**

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President & CEO, JCR-VIS
Founder, VIS Group

Faheem Ahmad has diverse experience with international consulting agencies in USA & Middle East. He has also held senior positions with local industrial and financial groups. In 1994, he established Vital Information Services (Pvt.) Limited, which is a leading capital market research house. VIS has the largest data bank of corporate Pakistan. His major research work includes copyrighted F&J financial strength rankings, Musharaka Variable Income Securities and stock market indices. VIS group includes JCR-VIS Credit Rating Company Limited and News-VIS Credit Information Services (Pvt.) Limited, the first private credit bureau of Pakistan. The majority of shareholders in group companies include the largest publication house in Pakistan and major financial institutions.

He obtained his B.S in Civil Engineering from NED University of Engineering and Technology, Karachi. He also has Masters degrees in Engineering and Business Administration from USA. His research work has been published in various international journals.

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Kiran Lakhwani, CFA, currently leads ratings of industrial concerns and structured finance transactions. She is also involved in ratings of finacial institutions. She holds a Masters degree in Business Administration from the Institute of Business Administration, Karachi.

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Sadaf Shabbir is involved in ratings in the industrial sector and in structured finance. Prior to joining JCR-VIS, she worked on several projects pertaining to strategic planning and organizational building as well.

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National Excellence, International Reach

Jahangir Kothari Parade

JCR-VIS Credit Rating Company Limited is committed to the protection of investors and offers a blend of local expertise and international experience to serve the domestic financial markets. With its international reach, JCR-VIS is positioned to aim for an international mark. In this regard, the global experience of our principal, Japan Credit Rating Agency, Ltd. has been invaluable towards adding depth to our ongoing research endeavors, enriching us in ways, that enable us to deliver our responsibilities to the satisfaction of all investors.

The edifice of the Jahangir Kothari Parade has stood proudly through the years and is a symbol of our heritage. Its 'Dome' as the most stable of building structures, exemplifies architectural perfection. Committed to excellence, JCR-VIS continues its endeavor to remain an emblem of trust.

Jahangir Kothari Parade (Lady LLoyd Pier)
Inspired by Her Excellency, The Honorable Lady Lloyd, this promenade pier and pavillion was constructed at a cost of 3 Lakhs and donated to the public of Karachi by Jahangir Kothari to whose genrosity and public spirit the gift is due. Foundation stone laid on January 5, 1920. Opened by Her Excellency, The Honorable Lady Lloyd on March 21, 1921.

Dome: A roof or vault, usually hemispherical in form. Until the 19th century, domes were constructed of masonry, of wood, or of combinations of the two, frequently reinforced with iron chains around the base to counteract the outward thrust of the structure.

Origins: The dome seems to have developed as roofing for circular mud-brick huts in ancient Mesopotamia about 6000 years ago. In the 14th century B.C. the Mycenaean Greeks built tombs roofed with steep corbeled domes in the shape of pointed beehives (tholos tombs). Otherwise, the dome was not important in ancient Greek architecture. The Romans developed the masonry dome in its purest form, culminating in a temple built by the emperor Hadrian. Set on a massive circular drum the coffered dome forms a perfect hemisphere on the interior, with a large oculus (eye) in its center to admit light.

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