

# **WISDOMTREE RULES-BASED METHODOLOGY**

WisdomTree Modern Tech Platforms Index

**Last Updated May 2019**

## WISDOMTREE RULES-BASED METHODOLOGY

### Methodology Guide for the WisdomTree Modern Tech Platforms Index

#### 1. Index Overview and Description

The WisdomTree Modern Tech Platforms Index [referred to as “the Index”] was developed by WisdomTree Investments (WTI). WisdomTree Modern Tech Platforms Index is comprised of mid- and large-cap companies that are generating substantial revenue from a modern platform business. A modern platform business can be defined as a multi-sided business model focused on creating value by facilitating interactions between two or more interdependent groups through technology. These platform businesses are positioned to benefit from the “network effect” which is the positive effect on a good or service as the number of customers or participants increases.

Included companies must facilitate the exchange of value between two or more groups, usually a demand side and a supply side and are often referred to as “consumers” and “producers,” respectively. Generally, platforms must allow consumers to easily sign up and provide a standardized process to onboard producers. Eligible platform types will include the following: services, product, payment, investment, social networking, gaming, communication, content and development.

The Index is reconstituted on an annual basis (following the close of trading on the second Friday in June<sup>1</sup>).

The Index is calculated to capture price appreciation and total return, which assumes dividends are reinvested into the Index. The Index is calculated using primary market prices and calculated in U.S. dollars.

#### 2. Key Features

##### 2.1. Membership Criteria

To be eligible for inclusion in the Index, component companies must be under coverage by the market management team of the third party independent index calculation agent, must list shares on a U.S. or European stock exchange and generate significant revenue from business lines active in modern platforms or digital marketplaces based on several factors such as business model, customer or participant relationship and revenue source. Companies need to have a float-adjusted market capitalization of at least \$2 billion and an average daily dollar volume of at least \$1,000,000 for each of the three months preceding the Screening Date (after the close of trading on the last trading day in May). If a

---

<sup>1</sup> Annual rebalance commencing June 2020.

security was recently listed and does not have 3-months of trading history, the data available since listing will be used to extrapolate a 3-month average daily traded value. Common stocks, REITs, tracking stocks, holding companies, ADRs, GDRs and EDRs are eligible for inclusion. Limited partnerships, limited liability companies, royalty trusts, Business Development Companies (BDCs) and mortgage REITs are excluded. Preferred stocks, closed-end funds, passive foreign investment companies, exchange-traded funds, and derivative securities such as warrants and rights are not eligible. The publicly traded security for WisdomTree Investments, Inc., ticker WETF, is not eligible for inclusion in any of WisdomTree's equity indexes.

In order to be classified as a platform business, a company needs to have financial metrics and applicable language in its Annual Report, 10K or equivalent report. As an example, the following information and guidelines will be used in making the classification.

**Customer relationship** - business has direct relationship with a user group who consumes value (e.g., product, service, content, etc.).

**Producer relationship** - business has direct relationship with an external user group who supplies the value to be consumed by another user group. In some cases, this producer user can be the same person as the consumer group, but they engage in a separate set of activities related to creating value when acting as a producer.

**Value Created by Producer** - the value (e.g., product, service, content, etc.) being consumed by Consumer user group is being supplied by a third-party and is not directly controlled by the company, and that supply does not sit on company's balance sheet.

**Network Effect** - there is a positive network externality between the consumer and producer user groups, meaning that the demand for the platform from one user group is dependent upon the number of users on the other side of the platform. The company will either explicitly mention it is subject to network effects or include a statement indicating that the more consumers that use the platform, the more value each producer will get from the platform, and vice versa.

**Network Ownership** -The company owns the network by which the consumers and producers directly connect. If the company services multiple customer groups but does not own the underlying network that connects them, it may not qualify (i.e., it is a service provider to that network, and not a platform business itself).

**Platform Revenue** - The company derives revenue from its platform business unit(s). There is direct platform revenue, which includes money captured as revenue by the platform as a percentage of the monetary value of each transaction it facilitates (e.g., a take rate). There is also indirect platform revenue, which includes revenue generated by providing products or services related to the facilitation of value exchanges on the platform (e.g., advertising, fulfillment services, additional software features that enable the user to transact on the platform).

**Platform Revenue Percentage** - The company must have a certain threshold of revenue that can be mapped or influenced from a platform business unit or relevant business units. The standard threshold is 50%, except for platform types that require high fixed costs due to hardware, upfront development, labor, or logistics costs, as in development platforms, services marketplaces, and product marketplaces. Targeted platform revenue thresholds by platform type:

- Product Marketplace: 20%
- Services Marketplace: 35%
- Investment Platform: 50%
- Payment Platform: 50%
- Social Networking Platform: 50%
- Social Gaming Platform: 50%
- Communication Platform: 50%
- Content Platform: 50%
- Development Platform: 20%<sup>2</sup>

## 2.2 Base Date and Base Value

The WisdomTree Modern Tech Platforms Index was established with a base value of 200 on April 30, 2019.

## 2.3 Calculation and Dissemination

The following formula is used to calculate the index levels for the Modern Tech Platforms Index:

$$\frac{\sum i \{S_i P_i E_i\}}{D}$$

$S_i$  = Number of shares in the index for security  $i$ .

$P_i$  = Price of security  $i$

$E_i$  = Cross rate of currency of Security  $i$  vs. USD. If security price in USD,  $E_i = 1$

---

<sup>2</sup> Development platforms also consider total dollar amount of revenue as well and will include companies that generate \$1 billion of revenue, regardless of percentage of total revenue.

D = Divisor

The Index is calculated whenever the stock exchanges are open. If trading is suspended while the exchange the component company trades on is still open, the last traded price for that stock is used for all subsequent Index computations until trading resumes. If trading is suspended before the opening, the stock's adjusted closing price from the previous day is used to calculate the Index. Until a particular stock opens, its adjusted closing price from the previous day is used in the Index computation. Index values are calculated on both a price and total-return basis, in U.S. dollars. The price Index is calculated and disseminated on an intra-day basis. The total return Indexes are calculated and disseminated on an end-of-day basis.

## 2.4 Weighting

The WisdomTree Modern Tech Platforms Index is an equal-weighted index.

The Weighting Date is when component weights are set and it occurs on Monday following the first Friday of the rebalance month. The changes will go into effect after the close of trading on the second Friday of the rebalance month.

The Index will be modified should the following occur. Should any company achieve a weighting equal to or greater than 24.0% of its Index, its weighting will be reduced to 20.0% at the close of the current calendar quarter, and other components in the Index will be rebalanced. Moreover, should the "collective weight" of Index component securities whose individual current weights equal or exceed 5.0% of the Index, when added together, equal or exceed 50.0% of the Index, the weightings in those component securities will be reduced so that their collective weight equals 40.0% of the Index at the close of the current calendar quarter, and other components in the Index will be rebalanced to reflect their relative weights before the adjustment. Further iterations of these adjustments may occur until no company or group of companies violates these rules.

Buffer Rules:

Market capitalization: an existing index constituent shall continue to remain in the index even if its market capitalization does not meet the previously defined minimum market capitalization criteria; but remains within 50% of this limit.

Liquidity: an existing index constituent shall continue to remain in the index even if its liquidity is below the previously defined average daily traded value limit; but remains within 50% of this limit.

Revenue: an existing index constituent shall continue to remain in the index even if its revenue does not meet the previously defined minimum criteria; but revenue from digital marketplaces remains over 40%.

The following liquidity adjustment factors will be applied:

A further volume screen requires that a calculated volume factor (the average daily dollar volume for three months preceding the Screening Date / weight of security in each index) shall be greater than \$400 million to be eligible for each index. If a security's volume factor falls below \$400 million at the annual screening, but is currently in the Index, it will remain in the Index. The securities' weight will be adjusted downwards by an adjustment factor equal to its volume factor divided by \$400 million.

In the event a security has a calculated volume factor (average daily volume traded over the preceding three months / weight in the index) that is less than \$400 million, its weight will be reduced such that weight after volume adjustment = weight before adjustment x calculated volume factor / \$400 million.

## 2.5 Dividend Treatment

Normal dividend payments are not taken into account in the price Index, whereas they are reinvested and accounted for in the total return Index. However, special dividends that are not reinvested in the total return index require index divisor adjustments to prevent the distribution from distorting the price index.

## 2.6 Multiple Share Classes

In the event a component company issues multiple classes of shares of common stock, the share class with the highest average daily volume will be included. Conversion of a share class into another share class results in the deletion of the share class being phased out and an increase in shares of the surviving share class, provided that the surviving share class is in the Index.

## 3. Index Maintenance

Index Maintenance includes monitoring and implementing the adjustments for company deletions, stock splits, stock dividends, spins-offs, or other corporate actions. Some corporate actions, such as stock splits, stock dividends, and rights offerings require changes in the index shares and the stock prices of the component companies in the Index. Some corporate actions, such as stock issuances, stock buybacks, warrant issuances,

increases or decreases in dividend per share between reconstitutions, do not require changes in the index shares or the stock prices of the component companies in the Index. Other corporate actions, such as special dividends and entitlements, may require Index divisor adjustments. Any corporate action, whether it requires divisor adjustments or not, will be implemented after the close of trading on the day prior to the ex-date of such corporate actions. Whenever possible, changes to the Index's components, such as deletions as a result of corporate actions, will be announced at least two business days prior to their implementation date.

### 3.1. Component Changes

#### Additions

Additions to the Index are made at the reconstitution according to the inclusion criteria defined above. Changes are implemented following the close of trading on the second Friday in June. No additions are made to the Index between reconstitutions, except in the cases of certain spin-off companies defined below.

#### Deletions

Shares of companies that are de-listed or acquired by a company outside of the Index are deleted from the Index and the weights of the remaining components are adjusted proportionately to reflect the change in composition of the Index. A component company that files for bankruptcy is deleted from the Index and the weights of the remaining components are adjusted proportionately to reflect the change in the composition of the Index. If a component company is acquired by another company in the Index for stock, the acquiring company's shares and weight in the Index are adjusted to reflect the transaction after the close of trading on the day prior to the execution date.<sup>3</sup> Component companies that reclassify their shares (i.e., that convert multiple share classes into a single share class) remain in the Index, although index shares are adjusted to reflect the reclassification.

### 3.2. Spin-Offs and IPOs

Should a company be spun-off from an existing component company it is allowed to stay in the Index that its parent company is in until the next reconstitution. Spin-off shares of publicly traded companies that are included in the same indexes as their parent company are increased to

---

<sup>3</sup> Companies being acquired will be deleted from the Index immediately before the effective date of the acquisition or upon notice of a suspension of trading in the stock of the company that is being acquired. In cases where an effective date is not publicly announced in advance, or where a notice of suspension of trading in connection with an acquisition is not announced in advance, WisdomTree reserves the right to delete the company being acquired based on best available market information

reflect the spin-off and the weights of the remaining components are adjusted proportionately to reflect the change in the composition of the Index. Companies that go public in an Initial Public Offering (IPO) and that meet all other Index inclusion requirements must wait until the next reconstitution to be included in the Index.

4. Index Divisor Adjustments

Changes in the Index's market capitalization due to changes in composition, weighting or corporate actions result in a divisor change to maintain the Index's continuity. By adjusting the divisor, the Index value retains its continuity before and after the event. Corporate actions that require divisor adjustments will be implemented prior to the opening of trading on the effective date. In certain instances where information is incomplete, or the completion of an event is announced too late to be implemented prior to the ex-date, the implementation will occur as of the close of the following day or as soon as practicable thereafter. For corporate actions not described herein, or combinations of different types of corporate events and other exceptional cases, WTI reserves the right to determine the appropriate implementation method.

Companies that are acquired, de-listed, file for bankruptcy, or re-incorporate outside of a defined domicile in the intervening weeks between the Screening Date and the Reconstitution Date are not included in the Index, and the weights of the remaining components are adjusted accordingly.

5. Selection Parameters

Selection parameters for the WisdomTree Modern Tech Platforms Index are defined in section 2.1. Companies that pass these selection criteria as of the Screening Date are included in the Index. The component companies are assigned weights in the Index as defined in section 2.4., and reconstitution of the Index takes effect as defined in section 3.1.